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NOMINAL COMPOUNDS IN ENGLISH AND RUSSIAN

by

© BERND-H. RÜSCHOFF

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled .....

Nominal Compounds in English and Russian

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submitted by .....Bernd-H. Rüschoff.....

in partial fulfilment of the requirements for the degree of

Master of .....Arts.....

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ABSTRACT

Compounding is one of the most diversified as well as most productive features of language. In their structure compounds combine morphological, syntactic and semantic principles. An adequate analysis and classification of compound formations has to result in the establishment of a limited set of recursive rules for a hypothetically unlimited set of data. In order to achieve this objective the analysis has to include all three of the above mentioned criteria; only then can the morphological, syntactic and semantic well-formedness of possible new formations be guaranteed.

Basically, compounds are single sound-meaning units which come into existence as a result of the combining of two or more already existing sound-meaning units. Compound formations can be divided into two parts: X + Y. Y denotes the so-called head or nucleus of the compound which is further modified, i.e. determined, by the preceeding, subordinate component X, also called the modifier.

Scholarly analysis hitherto has been based on two controversial principles:

1) On the assumption that compounds are formed analogically on the basis of already existing compound units.
2) On the assumption that compounds are formed in a process of word formation, starting from an underlying, corresponding paraphrase or sentence.

With regard to the major task of compound analysis it can be said that an investigation which examines the various steps in the process of compound formation on the basis of a corresponding underlying structure,

resulting in a classification system that reflects the syntactic relationship between the various components, leads to more adequate findings.

However, hitherto an intensive investigation of possible regularities in the order of compound components has been neglected almost entirely. Nevertheless, such an approach promises to lead to valuable results for the establishment of a recursive set of rules for compounding.

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I. INTRODUCTION

I.I General

One of the most complex problems in the various types of word formation in the present-day Indoeuropean languages is the problem of compounding. The class of compound words keeps gaining in importance, because compounds are one of the most productive features in the development and change of languages, as "the fundamental types of morphological word formation in present-day Russian are affixation, compounding and the non-affixal method of word formation."[1] Today's rapid evolution in all spheres of society, especially in industrial, scientific and technical areas, has a significant influence on the development of our most important means of communication. Our vocabulary grows almost day by day and the usage of the language changes swiftly. In this process of expansion compound words play an important part within word formation and therefore a clear and adequate analysis of their structures and the investigation of the various methods of compounding are necessary.[2]

J. Raecke, for example, describes the task of modern linguistics with regard to this problem as follows:

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1. N. M. Shanskij, Russian Word Formation (Oxford: Pergamon Press, 1968), p. 160.

2. Among others, N. M. Shanskij emphasizes this productivity of compounding when he states that "... compounding is extremely productive in the formation both of nouns and adjectives." (N. M. Shanskij, op. cit., p. 164).

> Für die Sprachwissenschaft ergibt sich die Aufgabe festzustellen, nach welchen Gestzmässigkeiten die Bildung dieser neuen sprachlichen Zeichen verläuft, und den Versuch zu unternehmen, die erkannten Gesetzmässigkeiten aus dem System der jeweiligen Sprache heraus zu erklären.[1]

Though thus far a final solution to the problem has not been found the present thesis intends to describe and compare various approaches in the synchronic analysis and classification of compounds in Russian and English.

This contrastive description of the problem of compound words will neither deal with, nor provide, a new theory of compound analysis; it will rather investigate the various approaches with regard to their effectiveness and applicability. In doing so these approaches will be compared first within the two languages; also an attempt will be made to extract the differences and similarities between English and Russian compounding with emphasis on Russian compounds.

Compounding has been neglected as an independent field of linguistic research for a long time. This is especially true for Russian linguistics, but also in English "word-formation offers far more difficulty, and is largely neglected in our traditional grammars", as L. Bloomfield stated in 1933.[2] Only in the 1950's and '60's have the problems of word formation, and related to this the investigation of compound words, been disclosed as an independent field of research

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1. J. Raecke, Untersuchungen zur Entwicklung der Nominalkomposition im Russischen seit 1917 (München: Slavistische Beiträge, Bd. 56), p. 1.

2. L. Bloomfield, Language (New York: Henry Holt & Company, 1933), p. 238.

in linguistics, though as early as 1750 Lomonosov regarded compounds as an independent part of word formation.[1]

This growing interest in research into compounds is partly explainable by the fact that, after Chomsky in particular and other linguists had developed the new system of transformational grammar, new points of application were contributed to the discussion of various word-formation theories as well as to the investigation of linguistic data in general. Many linguists became confirmed in their opinion that a mere description of the structure of a subject is not sufficient, and consequently in recent years many linguists have put forward various theories and approaches on the subject of compound analysis. However, there still is a lack of material, especially on Russian compounds.

Many monographs and grammars deal with the phenomenon "compound", but still mostly in a purely descriptive way. However, as has already been stated, a mere definition of the term compound and a description of the surface structure of compound words as well as the investigation of only individual problems and certain varieties of compounds is not satisfactory. As late as 1972 J. Raecke states:

> Der entscheidende Mangel der meisten russischen Arbeiten liegt meiner Meinung nach darin, dass die Bedingungen, unter denen das Russische Komposita bilden kann, bisher noch kaum geklärt und analysiert worden sind, weil man, bis auf wenige Ausnahmen, sich auf eine Konstituentenbeschreibung beschränkt hat."[2]

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1. M. Lomonosov, Polnoe sobranie sočinenij. Tom 7 (Moskva-Leningrad: 1952), p. 409.

2. J. Raecke, op. cit., p. 4.

The Academy Grammar of 1960[1] as well as the Grammatika sovremennogo russkogo literaturnogo jazyka (1970)[2] give a description of the surface structure of Russian compounds and classify them on the basis of this analysis; but both grammars do not take the decisive step of establishing a precise set of rules for the formation of new compounds.[3]

The most important part of the analysis of compound, however, is the formulation of a finite set of rules on the basis of which an infinite number of new, grammatically and semantically correct words can be formed. In English K. Hansen, R. B. Lees and H. Marchand[4] in particular have applied themselves to this problem, whereas in Russian only recently have various scientists made attempts to establish rules for the formation of Russian compounds. This is particularly surprising, because as P. W. Schönle describes in his monograph,[5] already in

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1. Academy Grammar (1960). Grammatika russkogo jazyka, Vol. I. Ed. by V. V. Vinogradov et. al. Moskva: Akademija Nauk.

2. Grammatika sovremennogo russkogo literaturnogo jazyka, Ed. by N. Ju. Švedova et al. Moskva: Izdatel'stvo "Nauka". 1970.

3. A full motivation for this statement will be given in chapter 3.2.3 of this thesis.

4. Especially H. Marchand is recognized as one of the pioneers in the investigation of English compounds and word formation. This is expressed by H. Pilch in his review of Marchand's The Categories and Types of Present-Day English Word-Formation by the following statement; "Der Thübinger Anglist H. Marchand leistet mit seiner englischen Wortbildungslehre jetzt auf diesem Gebiet die erste, entscheidende Pionierabeit, entscheidend einmal für die Theorie der Wortableitung überhaupt, zum zweiten als umfassende Darstellung der im heutegen Englisch gültigen Ableitungstypen."(H. Pilch, Review of, H. Marchand, 'The Categories and Types of Present-Day English Word-Formation in Jahrbuch für Amerika-Studien, 6, 1961, pp. 343-345).

5. Compare P. W. Schönle, Zur Wortbildung im Modernen Russisch (München: Slavistische Beiträge, Bd. 90) p. II.

1873 I. I. Sreznevskij stated that compounds are not formed without any structural background, but on the basis of so-called syntactic groups. Also the controversy of whether compounds are actually formed on the basis of such syntactical equivalents or rather in analogy to already existing formations led to some discussions already at the turn of the century.[1]

As a result of what is described above this thesis will deal mainly with those grammars, monographs and articles, which provide adequate theories or at least starting points not only for the analysis of compound words, but also for the establishment of a set of rules for the formation of new compound words. However, as an illustration the viewpoint of the Grammatika sovremennogo russkogo literaturnogo jazyka will be described in a separate part of chapter 3.

The research for this thesis is based on the Bibliography of Russian Word-Formation by Dean S. Worth[2] and, as some deficiencies have been found in that publication,[3] on the bibliographies of the materials used.

I.2 Delimitation of the subject

Because the problem of compound analysis is not only a complex but also a very diversified one, certain explanations have to be made

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1. Compare V. P. Grigor'ev, "O granicax meždu slovosloženiem i affiksaciej," Voprosy jazykoznanija 4, 1956 (Moskva: Akademija Nauk, pp. 38-52),p. 44.

2. D. S. Worth, A Bibliography of Russian Word-Formation (Columbus, Ohio: Slavica Publishers, 1977).

3. e.g., the monographs of J. Raecke, op. cit., and P. W. Schönle, op. cit., are not listed in this bibliography.

as to what problems this thesis will deal with, and to what extent the phenomenon "compound" will be covered in both languages. As has already been said, this thesis does not aim at completeness, and therefore it will only be a contrastive description of various attempts dealing with the problem of analyzing compounds and their classification.

First of all only nominal compounds will be investigated, i.e., compounds which grammatically belong to the class of nouns in both languages. Neither adjectival nor verbal compounds will be dealt with, as that would certainly exceed the limits of this presentation. Also within the area of nominal compounds certain restrictions have to be made, such as the fact that some problems will either be omitted or only touched superficially in the course of the thesis; as, for example, the problem of exocentric and endocentric compounds, which will not be investigated in detail.

However, on the basis of a descriptive investigation of the various theories this thesis will attempt to contribute some ideas to that discussion, which has always been the basic controversy in previous research. The controversy in question is whether compounds are formed on the basis of so called syntactic equivalents which, depending on one's point of view, are also called deep or underlying structures, or as analogical formations following the pattern of already existing compounds. The criterion for a final evaluation of both viewpoints will be whether or not a sufficient point of departure is given for the formulation of rules covering the formation of new compounds in the way described above.

The different results to which either approach leads will be

shown in chapter 3, though evaluation of the various methods of analyzing compounds must be restricted only to some critical remarks. A complete evaluation would certainly exceed the limited scope of this thesis. The major intention of this presentation is to show what different types of word formation are covered by the general term "compound", i.e., various definitions etc., and to describe how the subject has been treated up till now. Furthermore, we will attempt to show where some of the differences in Russian and English compounding occur, in particular, at which level (semantic, syntactic or morphological) such differences can be established; we will,moreover, give a brief outline of how the subject of Russian compounds could be treated in the future.

The decision to thoroughly investigate the monographs of J. Raecke and P. W. Schönle as well as the standpoint of Russian grammars has been made because most of the other material deals with individual problems; either the articles and monographs restrict themselves to a description of the history of Russian compounds,[1] or the investigation of compounds of a certain era is performed.[2] Some of the material only

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1. e.g. V.I. Ponomarev, "K istorii složnyx slov v russkom jazyke," Doklady i soobščenija instituta jazykoznanija Akademii nauk SSSR (Moskva) 4, 1953, pp. 44-58.

2. e.g. E.A. Vasilevskaja, Slovosloženie v russkom jazyke (Moskva: Ucpedgiz, 1962).

deals with compounds of a certain structure or compounds which consist of certain components.[1]

These works on the other hand give a general view of the problem, but nevertheless, the viewpoint of more specialized monographs and articles will be referred to at appropriate parts of this thesis.[2]

With regard to the English side of the problem, the material provided by K. Hansen, R. B. Lees and H. Marchand has been chosen, because it best represents the contemporary position of compound analysis in English linguistics.[3]

Finally it has to be said that this thesis will treat the problem in question in a purely synchronic way, because one of the principles in word-formation analysis is that the "analysis of the morphological structure of a word must not go beyond the limits of those links and relationships which exist between words in the word-formation system of the contemporary Russian literary language. In other words, word-

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1. e.g. L.A. Iljušina, "Složnye sušcestvitel'nye- nazvanija životnyx- v russkom jazyke," Vestnik Moskovskogo gosudarstvennogo universiteta. Serija 10: Filologija, (Moskva: 1966 -) 3, 1968, pp. 66-69.

V.V. Lopatin, "O složnyx slovax so vtoroj čast'ju -proxodec", Voprosy kul'tury reči (Moskva) 5, 1964, pp. 200-203.

The majority of literature on compounds, listed by D. S. Worth, deals with individual problems, which again stresses the fact that in Russian linguistics there still is a lack of general investigations of the subject.

2. This will especially be the case when a general definition of the term compound is given and various aims and approaches of compound analysis are described.

3. Compare footnote 4 on page 4 of this thesis.

formation analysis must remain clearly distinct from etymological."[1]

I.3 Reasons for contrasting English and Russian compounds

After the framework of this presentation has been given, we can proceed to a brief justification of the subject. We will begin with some remarks about the applicability of compound analysis.

Because of the importance of compounding in technical, scientific and industrial areas a clear understanding of those, often newly composed words is absolutely necessary. An unambiguous understanding of compounds, however, is only guaranteed on the basis of an adequate analysis of their structure. Therefore, the applicability of compound analysis in the above mentioned areas is undeniable. With respect to this, and because of the fact that technical and scientific cooperation between all nations is constantly growing, English and Russian are extremely suitable for the investigation of the subject, as both languages are the most frequently used means of scientific and technical communication. However, the thesis does not concentrate on only scientific or technical compound words.

P. W. Schönle refers to this problem as well as to the applicability of compound analysis in didactic-educational fields.[2] He underlines the difficulties, which are caused by the phenomenon "compound"

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1. N. M. Shanskij, op. cit., p. 11.

2. P. W. Schönle, op. cit., pp. 1-4.

in the process of learning a foreign language or even in the translation of texts from one language into another, especially as up to now compounds have been almost entirely neglected in the grammars used for language teaching.

Thus, H. Galinsky, being aware of this deficiency, emphasizes the importance of word formation with regard to educational matters, when he says that the positive effects of a precise knowledge of the structure of English vocabulary on the active and passive usage of the foreign language are unquestionable.[1]

As the results and perceptions of linguistic research are an important basis for the development of didactic grammars, used for consolidated language teaching, the importance of the subject with regard to this problem becomes obvious.

Furthermore, a contrastive observation of the matter, as attempted in this thesis, is of extreme value for the above mentioned educational problems, as the "knowledge of contrasts between the native language and the foreign language would be an invaluable aid to students in overcoming one of the main obstacles in language acquisition, vis., the habits of the native language. ... Ideally, any first-year instruction of a foreign language should be based on the findings of contrastive linguistics,..."[2]

---

1. H. Galinsky, "Gedanken zu einer neuen Darstellung der englischen Wortbildung", Die Neueren Sprachen, 7, 1962, p. 97.

2. G. Schaarschmidt, A Manual in Contrastive Linguistics: Part I (University of Alberta: Dept. of Slavic Languages, 1966), pp. 2-3.

The comparability of compound analysis in both languages is undeniable, as all languages are "cut from the same pattern".[1] Also, the subject of investigation is of the same basic structure in English and Russian. This becomes obvious from the fact that compounds in general are defined in similar ways for either language. A. M. Ball defines an English compound as "a single word composed of any two or more words joined together,..."[2] N. M. Shanskij understands Russian compounding as "the type of morphological word-formation where a new word is formed as a result of the joining together in a single word unit of two or more stems:..."[3]

On the basis of this statement we can now proceed to a further illustration of the existence of similarities and differences in Russian and English compounding as shown in fig. I on the following two pages.

---

1. J. H. Greenberg, ed., Universals of Language (Cambridge, Mass.: The M.I.T. Press),p. XV.

2. A. M. Ball, The Compounding and Hyphenation of English Words (New York: 1951),p. 3.

3. N. M. Shanskij, op. cit., p. 161.

Fig. I: This figure attempts to briefly contrast similarities and differences in Russian and English compounds.

A. Compounds for the same expression in Russian and English:

vodovoz	{vod-o-voz-Ø}	- water-carrier {water-carri-er}
lunoxod	{lun-o-xod-Ø}	- moon-rover {moon-rov-er}
pylesos	{pyl-e-sos-Ø}	- vacuum cleaner {vacuum-clean-er}
ranostav	{ranostav-Ø}	- early-riser {early-ris-er}
sudostroenie	{sud-o-stro-en-i-e}	- shipbuilding {ship-build-ing}
paroxod	{par-o-xod}	- steamboat {steam-boat}[1]

B. Compounds for the Russian but not the English expression:

pešexod	{peš-e-xod-Ø}	- pedestrian {pedestr-ian*}
sudogovorenie	{sud-o-govor-en-i-e}	- pleading {plead-ing}
kon'kobežec	{kon'k-o-bež-ec}	- skater {skat-er}
burevestnik	{bur-e-vest-n-ik}	- stormy petrel

C. Compounds for the English but not the Russian expression:

liven' vodostočnaja truba	{li-v-en-'}	- water-spout {water-spout}
istočnik	{is-toč-n-ik}	- water-spring {water-spring}
morskoj pejzaž[2]		- waterscape {water-scape}
časovščik	{čas-ov-ščik}	- watchmaker {watch-mak-er}

---

1. As in English the form -steamer- {steam-er} - is also possible, this example does also fit into group B. (comp.: kon'kobežec - skater)

2. However, we find formations with the first component -water-, which are expressed as compounds in Russian, as well, e.g., watershed - vodorazdel, where even the structure (N+N compound) is the same.

černyj spisok - blacklist {black-list}

černyj drozd - blackbird {black-bird}

D. Scientific expressions; compounds for Russian and English expression:

pjatiknižie {pjat-i-knič-i-e} - pentateuch {penta-teuch*}

pjatiokis' {pjat-i-okis-'} - pentoxide {pent-oxide*}

ionoobmen {ion-o-ob-men-Ø} - ion exchange {ion-ex-change-Ø}

zemletrjasenie {zeml-e-trjas-en-i-e} - earthquake {earth-quake}

E. Scientific expressions; compound for the Russian but not the English expression:

jazykoved - linguist

jazykoznanie - linguistics

literaturoved - literary critic

F. Scientific expressions; compounds for the English but not the Russian expression:

zvezdnoe skoplenie - star cluster

energetičeskaja set' - power circuit

silovaja ustanovka - power plant

G. Formations with one or more components which can only be explained etymologically:

English: some of the names of berries, such as cranberry, raspberry

pentateuch

A separation into morphemes which is indicated by { } has only been made when it provides necessary information for the contrast. All morphemic transcriptions, marked with * are actually no longer separable and analysable compounds, because they consist of etymological components. However, it was necessary to further exemplify the matter.

Russian: medved', netopyr'

H. So called pseudo-compounds or compounds which can only be explained idiomatically:

English: birdbrain - Russian: molokosos

Here we see that often compounds are formed in both languages to express the same meaning, but there are also cases where compounds exist only in one of the languages and various other types of word formation are used in the other language. Even special cases, such as etymological formations and compounds which have already transformed into idiomatic expressions, can be found in both languages.

On closer examination of the examples, the following contrast in the structure of compounds in English and Russian can be established. These contrasts, however, do not necessarily have to be of a general nature because of the limited amount of data used. Regarding the examples given in group A, it can be said that both languages follow the same pattern in the process of compounding. Compounds with the surface structure N(oun) + V(erb) are formed in the same way, except that the derivation N < V[1] is carried out by the nominal suffix -er in English, whereas in Russian a Ø - morpheme is used, for example, lunoxod - moon-rover. In the case of sudostroenie - shipbuilding the nominal form in the Russian example is derived from the past-passive

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1. The symbol N < V will be used to describe derivations of the type:

skater < skate + er
N < V + suffix

participle of the verb, whereas in the English compound the nominalization is carried out by forming the gerund of the verb, which is quite often used in the same way as participles are in Russian, e.g., game hunting, spring gardening, house keeping, rope dancing etc.

Compounds with the surface structure A(dverb) + V are of the same pattern, containing the above mentioned difference in the N < V - derivation in either language, e.g., ranostav-early riser. However, this does not indicate that these differences and similarities are of a general nature, as examples such as paroxod - steamboat are also found, where, in contrast to the Russian N + V structure, English has an N + N compound.

The examples given in groups B and C indicate that both languages seem to apply similar mechanisms of word formation in order to avoid compounding. Russian as well as English uses simple N < V - derivations for cases in which the other language forms compounds to express the same meaning, e.g., in cases such as kon'kobežec - skater or water-spring - istočnik. Interestingly, both the compound in the one and the N < V - derivation in the other language can be described by phrases corresponding to formations which have the same phrase-structure. The corresponding phrase for skater would be someone who runs (moves) on skates and kon'kobežec could be transformed into kto-nibud', kotoryj bežit na kon'kax.

On the other hand, examples such as burevestnik - stormy petrel and blacklist - černyj spisok or waterscape - morskoj pejzaž indicate that the formation Ad(jective) + N is used in either language in order to avoid compounding. In the case of water-spout - liven' / vodostočnaja truba we even find a combination of the two mechanisms

mentioned above. Russian applies either a N < V - derivation (as in - liven'-) or an Ad + N combination to express the meaning of the English compound.

However, examples such as sudogovorenie - pleading and watchmaker - časovščik show that exceptions for the above stated similarities exist. In the first case English uses a nominalized gerund and in the second case Russian forms a N < Ad - derivation instead of a compound.

The examples of groups D - F indicate that the above described differences and similarities apply also to scientific expressions in both languages. The example ionoobmen - ion exchange corresponds to lunoxod - moon-rover, the only difference being that in this case the N < V - derivation is performed by Ø-morphemes in either language. The pair literaturoved - literary critic follows the same pattern as examples of the kind burevestnik - stormy petrel.

This applies also to cases where the English scientific expression is a compound opposed to a different kind of word formation in Russian, as can be seen in Group F; e.g., star cluster - zvezdnoe skoplenie or power circuit - energetičeskaja se t'.

Moreover, the given examples show another contrast, concerning the way in which the two constituents of a compound are connected with each other in either language. Most Russian formations perform this connection by using a so-called linking-vowel, whereas the English examples are connected by either hyphenation, e.g., water-carrier or moon-rover, or without applying any overt orthographical means, e.g., shipbuilding and steamboat. The linking-vowels, not used in A + V combinations and some etymological formations, for instance as ranostav and medved', are o, e, i.

The examples given in groups G and H further emphasize the existence of comparable material in either language, because even such exceptional formations as etymological compounds or pseudo-compounds, as H. Marchand calls these units, and idiomatic compound expressions are found in English and Russian. These types of compounding will be investigated in chapter 2.4 of this thesis.

Although the contrast attempted above is far from being complete, it indicates that this could serve as a fruitful subject of investigation also in the area of contrastive word-formation theory. Such an investigation would be extremely valuable with regard to the above mentioned didactic-educational problem, as its findings and perceptions could serve as a consolidated basis for the overcoming of the difficulties created by the phenomenon "compound" for any non-native speaker learning English or Russian.

For the purpose of this presentation the contrastive description of compounds in either language only attempts to serve as an exemplification of the fact that it is quite possible to contrast compounds and their structure in English and Russian. This comparability is clearly brought out by the amount of similarities and differences stated for compounding in either language on the basis of fig. I.

2. DEFINITION OF THE TERM "COMPOUND"

2.I General Remarks

After these introductory remarks we should define more specifically the subject under investigation. However, this chapter will not result in a final definition, as we have already stated that this thesis should be regarded as a mere examination of the various aspects of compounding without the aim of providing final results .

However, as compounding is a very diversified feature of linguistics the definition has to include morphological, semantic and syntactic criteria, which often cannot be clearly separated from each other. Therefore, it will be necessary at times to link these criteria for the purpose of clarifying the subject.

According to the OED, in English the term "compound" was first used in 1621 with the following meaning: "A union, combination or mixture of elements,...."[1] Transferred to a linguistic level this means that compounds are a specific type of sound-meaning units, which are formed by joining, combining or mixing various linguistic elements.

N. M. Shanskij, who refers to compounding as one of the fundamental types of morphological word formation,[2] states that:

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1. The Oxford English Dictionary on Historical Principles (Oxford: At the Clarendon Press).

2. Compare N. M. Shanskij, op. cit., p. 160.

> ..., it must be noted that even morphological word formation does not lead to the appearance of absolutely new words in the language, of neologisms in the full sense of the word; it deals in essence only in new types of combination of something that previously existed separately.[1]

This leads to the conclusion that compounds are sound-meaning units that are formed by using already existing sound-meaning units, a definition which is fundamentally accepted by almost every linguist for English and Russian compounds.

A. M. Ball defines English compounds as single words "composed of any two or more words joined together, ..."[2] N. M. Shanskij gives an almost identical definition for Russian compounds:

> By compounding we understand the type of morphological word formation where a new word is formed as a result of the joining together in a single word unit of two or more stems: ...[3]

From a similar point of view, these definitions seem to be sufficient, but there is more information to be given concerning the nature of the inter-relationship between the components of compound words, and the character of the components themselves. Moreover, it appears questionable that it should be possible to choose at random any existing sound-meaning units, i.e., word, stem etc., and to combine them with the result of achieving a meaningful and structurally correct

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1. Compare N. M. Shanskij, op. cit., p. 160.
2. A. M. Ball, op. cit., p. 3.
3. N. M. Shanskij, op. cit., p. 161.

compound.

H. Marchand segments English compounds into two parts which have a so-called determinant/determinatum relationship:

> The coining of new words proceeds by the way of combining linguistic elements on the basis of a determinant/determinatum relationship called syntagma. When two or more words are combined into a morphological unit on the basis just stated, we speak of a compound.[1]

As all compounds in English are supposed to have this determinant/determinatum relationship, i.e., one of the two components of a compound is always determined or specified by the other one, we are at this point tempted to recognize one basic difference between Russian and English compounding.

According to the Grammatika sovremennogo russkogo literaturnogo jazyka, Russian compounds do not necessarily have to have the above described subordinate relationship between the two parts, because a coordinate relationship is possible as well. These are the two main groupings the above mentioned grammar establishes for Russian compounds. Nominal compounds are divided into "složenija s sočinitel'nym otnošeniem osnov" (compounds with a coordinate relationship between the constituents) and "složenija s podčinitel'nym otnošeniem osnov " (compounds with a subordinate relationship between the constituents). Nominal compounds with a so-called coordinate relationship

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1. H. Marchand, The Categories and Types of Present-Day English Word-Formation, A Synchronic-Diachronic Approach (München: C. H. Beck'sche Verlagsbuchhandlung, 1969), p. II.

between the two parts are defined as follows:

> Složnye suščestvitel'nye s sočinitel'nym otnošeniem osnov oboznačajut edinoe ponjatie, javljajuščeesja prostym soedineniem ponjatij, nazvannyx dvumja osnovami suščestvitel'nyx, ili sovmeščajuščee v sebe priznaki oboix ètix ponjatij:...[1]

Nevertheless, if we take a closer look at the examples for this type of compound nouns that are given in the grammar quoted from above, it can easily be recognized that there still is a determinant/determinatum relationship;[2] e.g., lesopark is not simply a park, but a park with trees (or a forest), železobeton is not simply cement, but a certain type of cement reinforced with iron, i.e., the first component determines the second one.

The statement above corresponds with our understanding of an existing determinant/determinatum relationship between the two components of compounds; in short determinant/determinatum relationship means that one component is specified, i.e., determined, by the other component of a compound formation. Generally, the determinant, i.e., specifying component, precedes the determinatum, i.e., the specified component.

The structure of these examples corresponds to the structure of the compounds cited in this grammar with a subordinate relationship between the two parts, e.g., xlebozavod, gazoballon, (bread-factory,

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1. Grammatika sovremennogo russkogo literaturnogo jazyka, p. 162.

2. However, very few examples can be found where the question of which component determines which remains insoluble, e.g., severozapad. These examples have to be regarded as exceptions, because the small number of such formations does not justify the establishment of a separate group.

gas balloon) etc. Here, the general meaning of the second component is specified or determined (i.e., limited) by the first element. As a result, in Russian compounding too, the above mentioned distinction seems to be indefensible.

However, as the grammar defines nominal compounds with a subordinate relationship between the two parts in a way similar to Marchand's definition, namely:

> Složnye suščestvitel'nye s podčinitel'nym otnošeniem osnov soderžaet opornyj komponent - suščestvitel'noe (prostoe ili affiksal'noe) i predšestvujuščuju osnovu utočnitel'nogo, konkretizirujuščego xaraktera.[1]

we can now proceed to further describe this determinant/determinatum relationship. This will be done on the basis of Marchand's explanations with regard to this problem, as they are applicable to both languages.

In the same way as the above quoted grammar, Marchand states that in general the determining element (determinant) preceeds the determined element (determinatum).

Marchand establishes the formula AB=B for these types of compounds, where component B can stand for the unit as a whole. In steamboat, for example, boat (B) carries the basic meaning of the whole unit which is modified by steam (A).

In addition, a so-called dominance structure can be established

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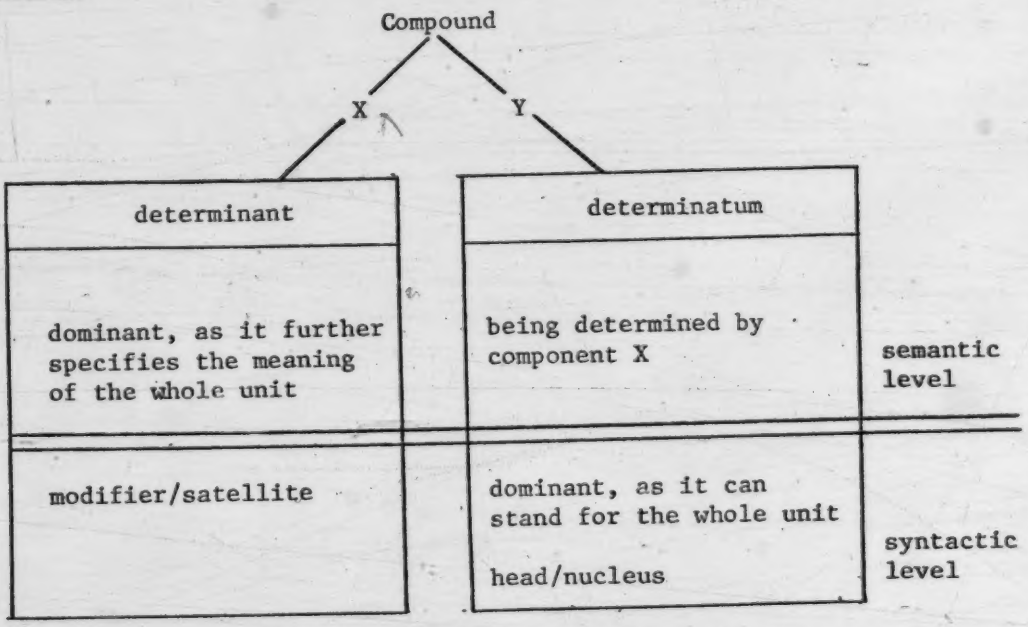
1. Grammatika sovremennogo russkogo literaturnogo jazyka, p. 162.

within compounds, i.e., one component dominates the other one. This dominance can be seen either from a syntactic point of view or on a semantic level; however, the two approaches lead to different results. Marchand determines only the syntactic dominance structure; on that basis we can exemplify the matter by means of fig. 2, which includes the possible dominance structures of compounds from both viewpoints, and shows the different results obtained by each approach.

fig. 2



In this figure we can clearly see the reasons for the differences in dominance structure on a semantic level on the one hand, and on a syntactic level on the other. On a semantic level the first component of a compound formation, i.e. X, is dominant as it is the component which gives the expression its specific meaning, whereas on a syntactic level the second component is dominant, i.e. Y, as it contains the most important syntactic information. This means that it specifies

the syntactic relationship between the two components of a compound, denotes the part of speech of the formation as a whole, etc.

R. B. Lees determines the dominance structure of compounds in a similar, merely syntactical way:

> In summary, then, a transformational description of nominal compounds assigns to each of the infinitely large set of such expressions a syntactic structure which consists of: 1) an underlying sentence embedded within another in a specified way, e.g., so as to have the constituent-structure of a MOD(ifier) dominated by N(oun), and 2) a superficial constituent -structure in which the two immediate constituents are parts of an N in a noun-phrase.[1]

As can be seen in fig. 2, such a onesided definition of the dominance structure in compounds is not sufficient for a complete analysis of the subject.

Another problem is created by Marchand's description of compounds as so-called expansions:

> Combinations of the types steamboat, colorblind, and rewrite which are mere morphological extensions of the words boat, blind, and write respectively, will be termed EXPANSIONS.[2]

On a syntactic level this definition appears to be justified, e.g., (boat(which is operated by steam))⇒ steamboat, i.e., morphological and syntactic EXPANSION of boat.

On a semantic level, however, a compound should rather be defined as a DELIMITATION, in that the general meaning of one of the

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1. R. B. Lees, "On a Transformational Analysis of Compounds: A Reply to Hans Marchand," Indogermanische Forschungen, 71, 1966, p. 12.

2. H. Marchand, The Categories and Types..., p. 11.

components is limited or modified by the other one. This is performed by the contraction of a term carrying a general meaning, into a limited part of that meaning. A steamboat is not a boat in general, but a boat operated by steam.[1] Consequently, the applicability of the term "expansion" for the subject appears to be problematic on a semantic level.

The definition and general explanation of the term "compound" given above applies to compounds in English as well as in Russian. However, still another difference in the definition of compounding for the two languages has to be mentioned. This difference can be recognized if we take a look at the distinction between so-called "primary" and "synthetic" compounds, made by Marchand for English compounding:

> Synthetic compounds are combinations whose second elements are deverbal derivatives from verbs which form a direct syntagma with the determinant (e.g., watch-mak-er, heart-break-ing).[2]

He also calls these phenomena "verbal nexus combinations" in his presentation, because within the underlying semantic structure the verb dominates, i.e., it carries the basic meaning. The structure of the basic sentence is: subject-predicate-direct object. According to Marchand the given examples are derivations from the "verbal nexus." Nevertheless, they are analyzable in the same way as "primary"

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1. The reader has to bear in mind the fact that all paraphrases for compound expressions, given in the course of this thesis, are not supposed to reflect the actual language usage (either in English or in Russian), but these paraphrases in most cases reflect an idealized and in some cases hypothetical form of language.

2. H. Marchand, The Categories and Types..., p. 15.

compounds, because they retain the determinant/determinatum structure within the formation.

This would mean that Russian compounds, such as lunoxod, vodovoz, kon'kobežec (moon-rover, water-carrier, skater) etc., whose second elements are also "deverbal derivatives" according to the description above, fall into the same category. However, in Russian publications no indication for such a distinction can be found. Compounds with this structure are generally referred to as formations with a N + N < V structure. The application of the term "synthetic" appears to be more confusing than useful, as these formations are analyzable in the same way as compounds with other constituent-structures.

R. Menge-Verbeeck states that this type of Russian nominal compound is based on the morphological structure: noun stem/verbal stem/zero-suffix/inflectional morpheme,[1] i.e., a structure which is similar to that of English compounds, the only difference being that English word formation mostly applies an er-suffix instead of a zero-suffix.[2]

At this point we will briefly describe a general feature of compounds in both English and Russian, the distinction between endocentric and exocentric formations; this distinction also refers to the functional relationship between the two components, i.e., both a syntactic and semantic relationship! This distinction also refers to

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1. R. Menge-Verbeeck, Nullsuffix und Nullsuffigierung im Russischen (München: Verlag Otto Sagner), p. 61.

2. See pp. 14-17 above.

the relationship of the components to the formation as a whole, i.e., an exclusively semantic relationship. E. A. Nida defines endocentric formations as those in which "the unit as a whole belongs to substantially the same external distribution class as the nuclear immediate constituent or both constituents."[1] He gives the example blackbird where bird as the nucleus belongs to the same distribution class as blackbird.

Marchand basically has the same understanding of endocentric compounds, but he further states that these formations have a real determinant/determinatum relationship. From this we may conclude that endocentric compounds are formations, the meaning of which is unambiguously recognizable on the basis of the formation as such, e.g., formations, such as

blackbird	< the bird is black
girlfriend	< the friend is a girl
kroveparazity	< parazity krovi (blood-parasites)
zemletrjasenie	< zemlja trjasët (earthquake)

where the second component (Y) is definitely determined by the first one (X).

Exocentric compounds, on the other hand, can only be understood by taking into consideration an "implicitly understood, but not formally expressed"[2] zero determinatum outside the formation.

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1. E. A. Nida, Morphology: The Descriptive Analysis of Words (Ann Arbor: The University of Michigan Press; 1949 2nd.) p. 94.

2. H. Marchand, The Categories and Types..., p. 11.

K. Hansen similarly defines endocentric formations as those where the compound in the given context can semantically be replaced by the second component.[1] He gives the example of blueberry, whose second component covers the basic meaning of the whole compound. The compound bluejacket is exocentric, because it denotes not a certain kind of jacket, but a person who wears such a jacket, i.e., a sailor.

In the following, Hansen establishes a simple test for the distinction exocentric vs. endocentric compounds:

> Der einfachste Test zur Unterscheidung beider aber besteht darin, dass man sowohl das Kompositum als auch seine zweite Komponente durch das entsprechende Personalpronomen ersetzt, wobei im Falle des Kompositums der Kontext als Stütze wirkt: Blueberry/it - berry/it, bluejacket/he - jacket/it. Stimmen die substituierten Personalpronomina nicht miteinander überein, so liegt auf jeden Fall ein exocentrisches Kompositum vor.[2]

This also indicates the existence of the above mentioned zero determinatum, but see below.

As a result, the determinant/determinatum relationship seems to be lost in exocentric compounds, and Marchand bases his definition on this assumption.[3] However, it can be said that exocentric compounds have a double determinant/determinatum relationship. The formation as a whole determines an "implicitly understood, but not formally

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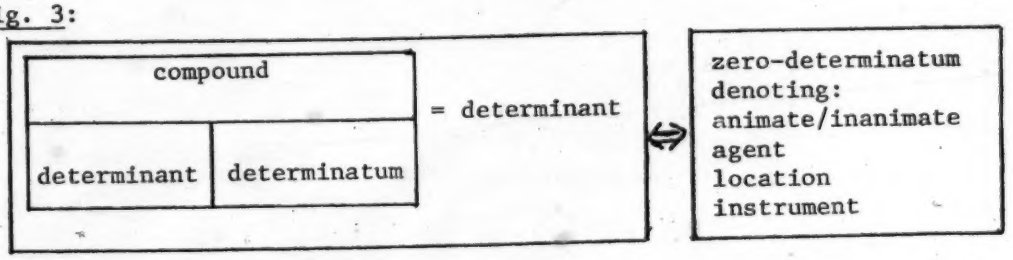
1. Compare K. Hansen, "Zur Analyse englischer Komposita," Wortbildung, Syntax und Morphologie. Ed. by H. E. Brekle & L. Lipka, (Paris, The Hague: Mouton, 1968), p. 119.

2. K. Hansen, op. cit., p. 119.

3. Compare H. Marchand, The Categories and Types..., p. 11.

expressed"[1] zero determinatum, but, nevertheless, its first component still determines the second one on a subordinate level. This we try to show by means of fig. 3, which refers to compounds with a deverbal derivation component (N < V) as the second component, as most of these formations are exocentric:[2]

fig. 3:



In the following we give some examples of this type of compound:

lunoxod	< mašina, xodjaščaja po lune (inanimate agent) (moon-rover)
pešexod	< čelovek, xodjaščij peškom (animate agent) (pedestrian)
ledorub	< instrument dlja rubki l'da (tool, instrument) (ice-axe)
moon-rover	< machine, roving across the moon (inanimate agent)
screwdriver	< instrument for driving-in screws (tool, instrument)
watercarrier	< person carrying water (animate agent)

These examples also indicate that the above mentioned way of distinguishing between endocentric and exocentric compounds by replacing the

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1. Compare H. Marchand, The Categories and Types..., p. 11.

2. However, an exocentric structure is not exclusively restricted to N + N < V compounds, as can be seen from the examples given by Marchand. In Russian, especially if nominal suffixes take part in the formation, they often are endocentric, e.g., zemletrjasenie.

compound as a whole and the second component with a personal pronoun is not useful for all types of compounds. Especially in the case of N + N < V compounds the animate vs. inanimate character of the second component can only be determined with great difficulty, e.g., rover/he? it?, xod/on $\begin{cases} \text{animate} \\ \text{inanimate.} \end{cases}$

However, from the above examples, the following statement appears to be justified. In the process which leads to the formation of exocentric compounds, i.e., corresponding word formation or sentence ⇒ compound, at least one component, most likely the head, of the corresponding paraphrase is deleted. This component retains its connections with the formation in the quality of the zero determinatum, which is determined by the compound as a whole, e.g.:

mašina, xodjaščaja po lune > lunoxod + (mašina)
machine roving across the moon > moon-rover + (machine)[1]

Due to the limited scope of this thesis, however, we will not further investigate this aspect of compounding. This problem which is an important and interesting subject, has to be dealt with in another, more specialized presentation.

On a semantic and syntactic level Russian and English compounding

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1. R. B. Lees makes a similar statement with regard to English compounding: "Now, on that view, the verb of the underlying sentence must in the analysis somewhere be deleted by a general rule of ellipsis. For example, if we analyze the compound car thief as reflecting the syntactic relations of a sentence The thief steals cars, as seems reasonable, then from the tree underlying that sentence, ..., the verb steal must be deleted."(p. 180).

in: R. B. Lees, "Problems in the Grammatical Analysis of English Nominal Compounds," Progress in Linguistics, ed. by M. Bierwisch and K. Heidolph (Paris, The Hague: Mouton & Co.), p. 180.

so far appear to follow similar patterns, as can be seen from the preceding remarks. In conclusion, a definition of compounding would not be complete if we did not consider morphological criteria as well.

At this point therefore we have to refer to a morphological difference between Russian and English compounding. In Russian compounding a so-called linking vowel (soedinitel'nyj glasnyj) is used in many cases in order to connect the two constituents. In English compounds no such means of connection can be found. In some cases, however, a hyphen is used in a similar way.

> Složnye slova imejut rjad četkix morfologičeskix otličij ot suffiksal'nix obrazovanij, naprimer upotreblenie soedinitel'nyx glasnyx o, e.[1]

The occurrence of either o or e depends on the phonological environment. If the first component ends in a "hard" consonant the linking vowel o is used, whereas in most cases of a soft consonant ending e is used; this can be seen in examples such as lunoxod, paroxod as opposed to pylesos (vacuum-cleaner) and zemletrjasenie. However, the linking vowels strictly follow the spelling rules of Russian, i.e., after š, č, ž, šč, c / o > e, e.g., licemer (hypocrite), pešexod.

As a linking vowel is not used in all Russian compound formations, A. N. Gvozdev gives yet another criterion for the distinction between compounds and similar units:

> Složnoe slovo - èto edinoe slovo, a ne sočetanie slov, čto polučaet vyraženie i fonetičeskim sredstvom - naličiem odnogo udarenija.[2]

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1. A. N. Gvozdev, Sovremennyj russkij literaturnyj jazyk, čast' I, (Moskva: Izdatel'stvo Ministerstva Prosveščenija RSFSR, 1958), p. 202.

2. Ibid., p. 203.

This criterion appears to be problematic, as for Russian compounds in almost every case a secondary stress, apart from the main stress, can be established, e.g., lúnoxòd, pýlesòs. With regard to this problem, Gvozdev states that new formations have two equally strong stresses at the beginning. The more frequently the formation is used however, the more a contraction towards one main stress can be observed.[1] He does not deny the existence of a secondary stress in compounds. This already indicates that such a means of distinction is not very helpful for our investigation.

With regard to English, H. Marchand rejects the stress theory as a criterion for the distinction between compounds and other formations, though in specific cases he points out that stress may have some significance for such a distinction.[2]

Taking a look at examples, such as prem'er-ministr and Moskva-reka, we clearly see the insufficiency of the above mentioned means of distinction. Both formations have two main stresses and superficially seem to be compounds. Yet Moskva-reka is not a compound, because both components are declinable, e.g., genitive singular: Moskvy-reki, whereas prem'er-ministr is a regular Russian compound as only the second component is inflected and the first component does not change, e.g., genitive singular: prem'er-ministra. Consequently, we can

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1. A. N. Gvozdev, Sovremennyj russkij literaturnyj jazyk, čast' I, (Moskva: Izdatel'stvo Ministerstva Prosveščenija RSFSR, 1958), pp. 39-40.

2. Compare H. Marchand, The Categories and Types..., pp. 24-30.

establish the following distinctive feature for compounds and other formations, applicable in both languages: compounds only inflect their second component, the first component always remains unchanged.[1]

However, with regard to the English language the matter appears to be more complicated. If we take a lock at examples, such as sister-in-law or brother-in-law, we are confronted with the problem that sometimes only the last component is inflected, in another case only the first one is inflected, whilst in the genitive plural both components inflect, e.g.:

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1. However, these phenomena have to be investigated more intensively, a task which has to be left for a more specialized presentation. A recent publication by D. Ward proposes that this type of word formation may be treated as a separate group of compounds, which he names Appositional compounds. D. Ward, "Appositional compounds in Russian", Slavonic & East European Review LI. No. 122, Jan. 1973, pp. 1-10. To present a slight indication of the problem of such formations we will give the following quotation, taken from a review of Ward's publication:

> Eti poslednie [appositional compounds] javljajutsja 'elliptičeskimi' obrazovanijami s propuskom sojuza i. Semantičeski appoz. slovosloženie tiPa A-B vyražaet, čto A javljaetsja takže B. ... Avtor zatragivaet delikatnyj voproz 'normy', ssylajas' na slovar' Ožegova, trebujuščego sklonenija slova vagon-restoran v oboix komponentax: vagona-restorana. Odnako v ustnom i pis'mennom jazyke kul'turnyx ljudej fleksija pervogo elementa často opuskaetsja. U Il'fa i Petrova naxodim reguljarno v vagon-restorane, dlja vagon-restorana (Slavia 27, 1958, 342). Neprekrascajusciesja spory o variantax na Moskva-reke/na Moskve-reke svidetel'stvujut, ostorožno govorja, o rasšatannosti 'normy'. (a.i) (Issačenko in Russian Linguistics Vol. I. Nos. 3-4, 1974, p. 370).

Due to the limited scope of this thesis we will not further investigate this problem.

nominative singular	:	sister-in-law
genitive singular	:	sister-in-law's
nóminative plural	:	sisters-in-law
genitive plural	:	sisters'-in-laws'[1]

Therefore we refer to these and similar formations as so-called borderline cases, which will be described in a subsequent part of this chapter.

2.2 The length of Russian and English compounds.

So far we have only talked about the fact that compounds, on the basis of the above described determinant/determinatum relationship, can be divided into two parts. However, the question concerning the length of compounds in general and the structure of these parts in particular, a question neglected up to now, is very important. The problem is, whether or not compounds can consist of more than two parts, i.e., can one or both parts of the formation consist of various elements. Basically, compounds with three or even more components are possible. Therefore, we will now briefly discuss this problem.

Though definite statements with regard to this matter have not been expressed for Russian compounding, we can assume the possibility of compounds with more than two components, for instance, Gvozdev defines Russian compounds as formations "sostojaščie iz dvux (inogda trex) osnov."[2]

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1. Compare R. A. Close, A reference grammar for students of English (London: Longman Group Ltd., 1975), p. 123.

2. A. N. Gvozdev, op. cit., p. 202.

With regard to English compounding, R. B. Lees states:

> Thus, since ideally there can be no longest nominal compound in the language, i.e., since the set of all well-formed nominal compounds of English must contain (countably) infinitely many members,...[1]

a comment, on the basis of which we can predict the existence of compounds with three or more components. He even refers to examples, the two parts of which are compounds themselves:

> It is easy to see that such compound expressions are of indefinitely great internal complexity, for the members of a compound may themselves be composite:[2]

For this phenomenon he gives the following examples:

> anti-Viet Nam war demonstrator
> Sugar cane plantation owner

However, H. Marchand calls formations with this structure "syntactic groups".

> Ist die determinierte Komponente ein Kompositum aus zwei vollen Wörtern, so wird die ganze Verbindung in der Regel eine syntaktische Gruppe mit zwei Hauptakzenten.... Erst recht wird eine Verbindung von vier Komponenten als syntaktische Gruppe aufgefasst...[3]

In general, he limits "primary" compounds to formations with not more than three full word components. Only the determinant can consist of

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1. R. B. Lees, "Problems in the Grammatical Analysis of English Nominal Compounds," p. 174.

2. Ibid., p. 174.

3. H. Marchand, "Die Länge englischer Komposita und die entsprechenden Verhältnisse im Deutschen," Anglia, 78, 1960, p. 414, 412.

two elements.

> Englische Komposita enthalten nicht mehr als drei volle. Wortkomponenten, obwohl affixierte Wörter möglich sind (...). Nach Carr hat das Englische zu allen Zeiten nie mehr als drei volle Wortglieder in einem Kompositum vereinigt. Es ist aber dabei zu beachten, dass nur das determinierende Glied zweikomponentig sein kann.[1]

At this point a further possibility for a distinction of the already mentioned example sister-in-law from "primary" compounds arises. Considering in-law as the determinatum of this formation, we could state that it cannot be a regular compound, because the determinatum consists of two components. However, as it is also possible to define in-law as the determinatum (what kind of sister? A sister-in-law, as opposed to what kind of in-law? A sister-in-law.) it appears to be more reasonable to state that this example is not a regular compound on the basis of the special inflectional pattern of such examples, as have been shown before. Furthermore, regular or so-called "primary" compounds always have a structure, where the determinant has the position of the first component.

Though theoretically compounds with more than two components can exist, and we actually find examples for formations with such a structure, the general tendency is to restrict compounds to formations with two full word-components. However, affixation is possible for both parts, i.e., suffix-derivation as well as prefixation can be observed

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1. H. Marchand, "Die Länge englischer Komposita und die entsprechenden Verhältnisse im Deutschen," Anglia, 78, 1960, pp. 411-412.

for both the determinant and the determinatum.

The vast majority of nominal compounds in Russian and in English consist of only two basic components, i.e., word or stem. This can be explained by the fact that the meaning and structure of formations with more components can be understood and analyzed only with greater difficulty. As the application and formation of compounding serve mainly as a means of simplification, i.e., the expression of a certain, complex meaning in the least complicated way, the formation of extremely long compounds appears to be paradoxical.

2.3 Compounds vs. derivations

Because we find many different kinds of word-formational elements in the process of compounding, we will at this point explain the differences between "primary" compounds and derivations. However, this part will be restricted to the investigation of the problem of affixation vs. compounding only.

In both languages prefixed determinants as well as suffix derivations in the structure of the determinatum are possible, as can be seen from the following examples:

English: prefixed determinant - dis-armament-talks

sub-way station

suffix-derivation determinatum - eye-special-ist

cooking-equip-ment

prefix determinatum - equip-ment-dis-posal[1]

1. To our knowledge, examples of this type do not occur in Russian.

Russian: prefixed determinant - po-sudomojka

suffix-derivation
determinatum - novolet-ie

vodoprovod-čik

However, taking a look at the Russian example for a compound with a prefixed determinant, we have to admit that, though structurally seen, po is a prefix in this formation, because the compound sudomojka (kitchen-maid) exists as well, a native speaker would most likely not make such a distinction and rather see posuda as one word without a prefix. Moreover, there are very few prefixed-determinant compounds in Russian, whereas in English such formations occur quite frequently.

These opaque prefixes, i.e., non-transparent prefixes, such as po in the above mentioned formation, are found also in the few compounds with a prefixed determinatum in both languages. Formations, such as book-review or weather fore-cast and vremja-pre-pro-voždenie (way of spending one's time) or vodo-pro-vod (water pipe) are very rare in English and Russian. However, the above mentioned problem indicates that prefixes as well as suffixes, i.e., all affixes, play an important role in the process of compounding; the main problem is where to draw the line of distinction between "primary" compounds and so-called affixations.

The first problem arises if we take a look at formations, such as vyxod, vxod, perexod in Russian or overthrow, overstrain, overflow in English, i.e., formations with a preposition as the first component and a N < V derivation as the second component. Though these examples formally speaking consist of two meaningful units, i.e., they fulfill the basic criterion of compounding, they will not be analyzed and

classified as compounds; formations with this structure are zero-derivations, as both components already exist in the verb from which they are derived, e.g., vyxodit' > vyxod-Ø, perexodit' > perexod-Ø, to overthrow > overthrow-Ø, to overflow > overflow-Ø. The Grammatika sovremennogo russkogo literaturnogo jazyka names such formations "Prefiksal'nye suščestvitel'nye s nulevym suffiksom",[1] and Marchand analyzes English formations of this type as prefix-derivations:

> While verbs formed with preparticles are compounds in so far as they consist of two independent words, formally speaking, we note that the particles do not behave like substantives, adjectives and verbs as first elements of compounds.[2]

From this K. Hansen concludes:

> Die verbalen Partikelkomposita stehen also den Präfixableitungen sehr nahe und sind auch für die Wortbildungsanalyse wohl praktischer wie diese in einem Wörterbuch unter den in alphabetischer Reihenfolge eingeordneten Partikeln zu erfassen.[3]

Therefore, we may conclude that prefixed noun-formations, as they are derived from prefixed verbs, i.e., preparticle verbs, have to be analyzed as prefix-derivations. However, such derivations do not necessarily have to be zero-derivations, which is indicated by the

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1. Grammatika..., op. cit., p. 158.

2. H. Marchand, "Compound and Pseudo-Compound Verbs in Present-Day English", Anglistische Studien, XXXII (1957), p. 87.

3. K. Hansen, op. cit., p. 117.

following examples: understanding < to understand or otnošenie < otnosit', vyxodec < vyxodit' etc.

In English the matter becomes even more complicated if we take into account examples such as playoff, tune-up and goings-on, tuners-in, i.e., formations with the preposition as the second component; formations of this type are not possible in Russian. These derivations may also serve as the first or second component, i.e., determinant or determinatum, of a regular compound, as is shown by the compounds playoff-goal (average), tune-up shop, spring tune-up etc. The inflectional pattern of these formations as well as this type in general deserve a thorough investigation in a more specialized presentation. However, the inflectional pattern of tune-up(s) or playoff(s) as opposed to examples, such as going(s)-on or tuner(s)-in seem to indicate that whenever a suffix (-ing and -er in the given examples) is involved in the formation of the first component, they are the ones that are declined; if, on the other hand, the first component is a zero-derivation, the second component is declined. However, due to the limitations of this thesis the above mentioned cases, which are quite common in English and American colloquial usage, and the conclusions drawn from their investigation must be seen merely as suggestions for further research into such phenomena.

Returning to the problem of compounding vs. affixation, we can state that in the analysis of English compounding there is generally no distinction made between compounds without suffixes, and formations in which one component is formed by means of suffixation; therefore, formations, such as ion-exchange-Ø and water-carri-er are both analyzed as regular "primary" compounds. In Russian word-

formation analysis, however, some linguists state that "it is particularly important to keep compound words clearly distinct from ... words formed by affixation."[1] N. M. Shanskij makes a clear distinction between compounds, e.g., vodoprovod-Ø, and affixations, e.g., vodoprovod-čik:

> Not every word which has two or more roots in its composition is a word which has been formed by compounding. Besides compound words, one may find words derived from compounds by affixation. For example, the words vodoprovodčik, ..., edinoličnik, raznogolosica, paroxodstvo are not formed as compounds, as might be supposed, considering the presence of two independent roots in their morphological composition, but are suffixal formations; they only are formed from the compound words: vodoprovod, ..., edinoličnyj, raznogolosyj, paroxod, with the suffixes -čik, ..., -ik, -ic(a), -stv(o).[2]

In the following we will investigate the applicability of such a distinction and such an approach.

V. P. Grigor'ev establishes the following basic distinction between compounds and affixation:

> ... my, dejstvitel'no, dolžny govorit' o dvux tipax obrazovanija složnyx suščestvitel'nyx: 1) na osnove slovosočetanij i 2) po analogii s uže imejuščimisja složnymi suščestvitel'nymi? Očevidno, čto po suti dela reč' pri etom budet idti o sxodstve i različijax meždu slovosloženiem (sintaksiko-morfologičeskim sposobom slovoobrazovanija), s odnoj storony, i affiksaciej (analogičeskim obrazovaniem slov, morfologičeskim sposobom slovoobrazovanija) - s drugoj.[3]

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1. N. M. Shanskij, op. cit., p. 162.

2. Ibid., p. 163.

3. V. P. Grigor'ev, op. cit., p. 39.

From the statements of both linguists and their approaches in general we can conclude that vodoprovod and similar formations are compounds formed on the basis of a corresponding word formation (i.e., deep structure), whereas formations of the type X + V-suffix are derived per analogiam from a compound X + V-Ø, e.g., letopis' > letopisec. However, as in some cases a direct word-formational line from the X + V-Ø compound to the X + V-suffix formation cannot be traced, e.g., literaturoved ≠> literaturovedenie, where the verbal component of the second formation is not derived from X + V-Ø but from the past passive participle form + -i-e, we assume rather that in both formations the verbal component is derived from the verb in a corresponding underlying-structure. Therefore, we will treat formations with one affix-derivational component as regular compounds in this analysis.

As Russian suffixes generally have a very specified semantic meaning, e.g., -tel', -ik, -ec, etc., denoting an "agent" or "doer", we may conclude that X + V-suffix compounds are most likely endocentric as opposed to the exocentric structure of X + V-Ø formations. For example:

truba, kotoraja provodit vodu > vodoprovod + (truba = instrument)

čelovek, rabotajuščij s vodoprovodami > vodoprovod + čik

These examples indicate that formations of the type X + V-Ø are exocentric, i.e., they delete one component of the corresponding paraphrase in the process of their formation and retain it as the zero-component which is determined by the compound, whereas formations with a suffix are endocentric, as the agent of the corresponding paraphrase is expressed by the suffix -čik (in the given example), i.e., the

meaning of such compounds is clearly understandable from within the formation. This means that the semantic and syntactic information carried by the head (i.e., agent) in such paraphrases is expressed by the suffix in the surface structure, i.e., the compound formation itself.

N. M. Shanskij states yet another approach to the problem of distinction between compounding and affixation. He speaks of so-called affiksoidy when he classifies elements, such as -ved, -vod, -xod, or polu-, gore- in Russian compounding. Depending on their word formational function they are either prefiksoidy, i.e., used in the manner of prefixes, or suffiksoidy, i.e., used in the manner of suffixes. In general, he defines affiksoidy as follows:

> Affiksoidy predstavljajut soboj imenno affiksoid liš' togda i do tex por, kogda i poka on ispol'zuetsja i kak kornevaja ili osnovnaja, i kak affiksal'naja morfema, v poslednem slučae xotja i imejuščaja obobščenno slovoobrazovatel'nuju semantiku, identičnuju semantike affiksov, no tem ne menee sootnositel'nuju s leksičeskim značeniem kornja ili osnovy.[1]

Therefore, Shanskij concludes that compounds which are formed by using these affiksoidy are still regular compounds, as they still retain links with the corresponding component in the deep structure.

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1. N. M. Shanskij, "Affiksoidy v slovoobrazovatel'noj sisteme sovremennogo russkogo literaturnogo jazyka," Issledovanija po sovremennomu russkomu jazyku, ed. by T. P. Lomtev & A. A. Kamynina, (Moskva: Izd. Mosk. Univ., 1970), p. 259.

> S drugoj storony, affiksoidy, upotrebljajas' kak affiksy, vse že prodolžajut ostavat'sja i četko osoznavat'sja kornevymi morfemami ili osnovami, soxranjajuščimi svoi semantičeskie i genetičeskie svjazi s sootvetstvujuščimi kornjami. Affiksoidy '-vod, polu-, ..., ved' i t. d. v slovax tipa 'lesovod, polusvet, ..., literaturoved'i. dr. neotdelimy ot sootvetstvujuščix morfem v slovax 'razvodit', polovina i pol, ..., vedat'' i t. d.[1]

In the following he clearly states that a distinction between these affiksoidy and affixes in word formations includes a distinction between compounds and affixations, i.e., derivations.[2]

N. Ju. Švedova simply classifies compounds as "suffiksal'no-složnye slova" whenever a suffix is involved in the process of compounding;[3] such formations are, for example, basnopisec, mašinostroenie, rukomojnik[4] etc. However, she fails to give any precise means of distinction between "primary" compounds and affixations. From the text we may conclude that Svedova accepts these suffixal compounds in Russian as regular compounds.

Nevertheless, on the basis of the above mentioned approaches we propose not to make a distinction between regular compounds and affixations, since prefixes as well as suffixes play an important part in the formation of compounds. Also, a distinction between affiksoidy and other word-formational elements in the process of compounding, as

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1. N. M. Shanskij, "Affiksoidy ..." , p. 258.

2. Compare Ibid., p. 259

3. Grammatika sovremennogo ..., ed. by N. Ju. Švedova et.al. op. cit., p. 166.

4. Translation: writer of fables, machine-construction, wash-stand.

proposed by Shanskij, appears to be more confusing than helpful for the purpose of compound analysis. Therefore, our criterion for a distinction between regular compounds and other formations will be whether or not two (or more) meaningful units are recognizable in a certain word formation; as this is the case in vodoprovodčik and paroxodstvo as much as in lunoxod, vodoprovod and paroxod, all such formations are regular compounds and have to be taken into consideration in the analysis of compounds.

As a conclusion we may state the following. On a semantic level there is no difference between compounds with and without affixation. However, compounds with affixation are most likely exocentric, whereas most other formations are endocentric. On a syntactic and morphological level we may establish differences, as the morphological structure of compounds with affixation is certainly different from the one of compounds without affixation; also the syntactic hierarchy within the two types is different.

Taking a look only at the surface structure of a compound, we can formulate a difference between a formation of the type X + Y + Suffix and a formation of the type X + Y + Ø. Nevertheless, since this approach does not contribute much to the formulation of a general, recursive set of rules for compound formation and since the existence or non-existence of affixation does not have any significance for the analysis of compounds on the basis of their corresponding paraphrases, a distinction between compounding and affixation (i.e., derivation) in the above described manner is not useful for the purpose of compound analysis.

2.4 Excursus: Borderline cases.

In this part we will describe certain phenomena which from a structural point of view could be called compounds, but because of certain deviations will not be the subject of this presentation. The criterion for the decision, whether we are dealing with so-called "primary" compounds or "pseudo-compounds" is whether or not the formation on hand is synchronically analyzable.

> In den Vordergrund rückt dann die Frage, ob ein Wort analysierbar ist oder nicht, d.h. die Unterscheidung zwischen lebendigen (analysierbaren) und etymologischen (nicht mehr analysierbaren) Wortbildungen bzw. Monemen (unanalysierbaren Wörtern) schlechthin. Gegenstand der Wortbildungsanalyse sind die lebendigen Wortbildungen, worunter wir die Wörter verstehen, die synchronisch hinsichtlich ihrer Form wie ihrer Bedeutung einem bestimmten Typ der jeweiligen Sprache entsprechend analysiert werden können.[1]

In the course of this thesis we will only deal with "primary" compounds, i.e., synchronically analyzable formations. However, a brief description of the charac ter of formations which are not synchronically analyzable will be given.

With regard to English and Russian two major categories of non-analyzable formations can be established. They are, nevertheless, structurally similar to "primary" compounds. The first category will be called "idiomatic compounds", which Marchand calls "pseudo-compounds."

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1. K. Hansen, op. cit., p. 116.

> Pseudo-compounds are combinations with a compound determinant and a zero determinatum.[1]

Taking a look at the example birdbrain, it appears to be more suitable to define such formations as "idiomatic compounds", as the sum of the meaning of the components does not correspond with the total meaning of the formation as a whole. Structurally we can divide the formation into two components, which represent meaningful units, but on a semantic level the complete loss of the determinant/determinatum relationship can be observed.

The formation as a whole functions as an idiomatic expression, representing the determinant of an external zero determinatum. This phenomenon clearly distinguishes them from regular exocentric compounds, as the latter still retains a subordinate determinant/determinatum relationship within the formation. Birdbrain denotes not the brain of a bird, but a person with the brain of a bird, i.e., a dull or foolish person. For this example Marchand establishes the rule "person-denoting zero morpheme/determined by 'birdbrain', ..."[2]

In English blockhead is another example for this type of borderline case, and the Russian molokosos, which finds its correspondence in the English "idiomatic compounds" baby face and milksop, fits into the same category. This formation does not denote a person who sucks milk, but someone who behaves like a person at this early stage of life. As a result, we can establish the following rule for this type

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1. H. Marchand, The Categories and Types ..., p. 13.

2. Ibid., pp. 13-14.

3. However, the Russian formation does not necessarily carry a derogatory connotation.

of compound-like word formation: X-denoting zero determinatum/determined by C(ompound).[1]

The second category will be referred to as "etymological compounds", i.e., compounds with one or even two components which can only be explained diachronically by investigating their etymology. In English examples, such as some of the berry names, e.g., cranberry, raspberry, and pentateuch, belong to this category. In cranberry and raspberry the first components, i.e., cran and rasp, do not represent independent sound-meaning units any more; they would be referred to as bound morphemes which only obtain a certain meaning in connection with the second component of the above given formation.

In Russian the examples medved' and netopyr belong to this category. In medved' only the first component can be segmented as an independent sound-meaning unit, derived from med (honey), whereas the second component lost its independent meaning. In the case of netopyr both components are only etymologically explainable. Therefore, these units are not subjects of our investigation, as they are no longer

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1. Gvozdev defines these "idiomatic compounds" as formations with an obscured structure (zatemnennyj sostav), e.g., skopidom (miser, skinflint). However, he obviously confuses these examples with "primary" exocentric compounds, as he characterizes formations, such as verolomstvo, in the same way.

Note: verolomstvo = dejstvie čeloveka, lomajuščego veru

Compare A. N. Gvozdev, op. cit., pp. 204-205.

synchronically analyzable.[1]

The third type of borderline cases are formations which H. Galinsky defines as "clipped compounds" for the English language.[2] In Russian these formations are either called "stump compounds"[3] or simply "abbreviatury" (abbreviations). Examples for this type of word formation are navicert, derived from navigation certificate, or mestkom, derived from mestnyj komitet. These formations are formed by the process of clipping compounds, as can be seen in the English example,

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1. However, the example medved' creates a problem, as it may also be regarded as an analyzable unit. The formation can etymologically be explained by either medu + ed, i.e., honey-eater, or by medu + ved, i.e., honey knower. Because in modern Russian the verb vedat' (to know) still exists, one might define this formation as a compound with a N + N < V structure, though it would obviously belong to the category of "idiomatic compounds". Nevertheless, the fact that no linking vowel is used in this formation, as is the case in almost all compounds with this structure, and the existence of the soft jer ('=ь) at the end, indicate that medved' is an "etymological compound."

Another interesting point with regard to this type of borderline case, is that by contrasting the form cranberry with some dialectal Russian translations for this type of berry, such as žuravika, -ina, -lina, we find indications for a connection between the first component cran and the English noun crane. The basis of the above given Russian forms is žuravl' which means crane. However, as there are no semantic links between crane and cran, this assumption appears to be extremely hypothetical and a classification of cranberry as an "etymological compound" seems to be more reasonable.

Compare also N. P. Grinkova, "O nazvanijax nekotoryx jagod v vostočnoslavjanskix jazykax," Slavjanskaja filologija, III, 1958, pp. 116 -

Note also: cranberry = German Kranichbeere. (Kranich = crane)

2. H. Galinsky, op. cit., p. 117.

3. D. Ward, The Russian Language Today (London: Hutchinson University Library, 1965), pp. 156-157.

The term "abbreviatury" is used by the Grammatika sovremennogo russkogo literaturnogo jazyka, p. 175.

or by clipping other types of word formation, as can be seen in the Russian example. H. Marchand defines clipping as follows:

> Clipping consists in the reduction of a word to one of its parts. Clippings are mutiliations of words already in existence.[1]

Due to the limited nature of this thesis a detailed description of this phenomenon cannot be given.[2] However, especially in Russian this type is very productive in scientific and administrative language, as can be seen from the amount of examples given in various monographs, grammars and articles.

Finally, we have to mention yet another type of borderline case with regard to English compounding. K. Hansen defines verbal formations of the type spotlight or stagemanage as zero-derivations and back-derivations, since either the noun is derived from an already existing verb with an identical constituent structure, or the verb is derived from an existing noun of the same type.:

> Die verbalen Prägungen vom Typ spotlight, blacklist ... sind ebenso wie die vom Typ stagemanage, sight-see ... lediglich 'Pseudokomposita' und hinsichtlich ihrer Bildung (to spotlight < spotlight + Nullableitung; to stagemanage < stage-manager Rückableitung) wie ihrer Analyse der Ableitung zuzuordnen.[3]

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1. H. Marchand, The Categories and Types ..., pp. 357-363.

2. However, at this point we will quote D. Ward's definition of the various types of "stump compounds" as an exemplification:

> Several types of stump-compounds may be distinguished: (a) those consisting entirely of parts of words (usually, though not always, single syllables), (b) those consisting of part of a word and a complete work, (c) those consisting of initials (...), and (d) a mixed type, consisting of initials and part of a word or parts of words.

See D. Ward, op. cit., p. 157 for a further description and examples.

3. K. Hansen, op. cit., p. 117.

As a result, we have to classify this type of word-formation as a borderline case, despite the fact that two meaningful units can be analyzed in such formations.

With regard to nominal compounds we would define such formations as either zero-derivations (e.g., spotlight-Ø) or suffix-derivations (e.g., stagemanag-er) in order to simplify the matter for the purpose of compound analysis. Therefore, all formations which have a corresponding verb with an identical constituent structure, e.g., to spotlight / spotlight, to stagemanage / stagemanager, to sight-see / sight-seeing, have to be classified as borderline cases and analyzed as such. Nevertheless, in stating this we bear in mind the fact that in many cases, it is hard to determine whether the noun-formation is derived from the verbal formation or an opposite derivation has taken place. As a result, the above given definition should be seen as an attempt to simplify the matter for our purposes, leaving this problem aside for the time being.

3. VARIOUS METHODS OF COMPOUND ANALYSIS AND CLASSIFICATION.

After our attempted definition and explanation of the subject of our investigation in the prece ding chapter, we will continue by briefly describing various approaches to compound analysis in English and Russian. As our intention is not to provide a final solution but to give a general survey of the problem, we will restrict ourselves to a description of the basic characteristics of the various theories. Also, apart from a few remarks, we will not attempt an extensive criticism of the approaches presented.

3.1 Aim of Compound Analysis.

Before we start with the presentation of individual theories a general explanation of the intention and aim of compound analysis should perhaps be given. The basic task of compound analysis, like the task of analysis of sound-meaning units of any kind, is to uncover and explain certain regularities. With regard to compounding, these regularities are most commonly found within the relations which single elements of compounds have between one another. Lees establishes the following definition of this task:

> Our analytic task is, then, to provide reasonable mechanisms in the grammar for the generation of a large variety of grammatically different nominal-compound types. From the examples given it would seem rather unlikely that these mechanisms will be few in number or that the apparatus as a whole will be extremely compact and general. Nevertheless, we shall be able to exhibit a great deal of regularity among compounds ....[1]

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1. R. B. Lees, The Grammar of English Nominalization (GEN) (Indiana University Research Centre in Anthropology, Folklore and Linguistics, Publication 12., January 1963), p. 119.

On the basis of the investigation of such regularities we then have to elaborate a finite set of rules which enables us to state whether or not a newly formed compound is syntactically as well as semantically well formed. This task results from the fact that languages change continuously, as already mentioned, by creating new sound-meaning units almost every day:

> Auf die Komposita angewandt besteht die Aufgabe eines transformationellen Grammatikers darin, ein Regelsystem zu formulieren, das durch eine finite Menge von Regeln alle grammatisch wohlgeformten Komposita einer Sprache erzeugt und ihnen eine Strukturbeschreibung zuordnet. Da die Zahl der möglichen Komposita infinit ist, - man kann täglich neue, noch nie verwendete Wörter bilden -, die Zahl der Regeln jedoch finit sein muss, müssen die Regeln rekursiv sein, d.h. sie müssen wiederholt anwendbar sein.[1]

However, neither mere syntactical analysis of compounds, nor a description of their morphological structure are satisfactory; a semantic analysis must be included in the formulation of such rules, because on the basis of purely syntax or morphology oriented set of rules, one could create the possibility of forming units reflecting the correct syntactic and morphological structure of already existing compounds, but units which were at the same time semantically incorrect, i.e., meaningless.

When Marchand explains the principle of compounding as follows:

> The principle of combining two words arises from the natural human tendency to see a thing identical with another one already existing and at the same time different from it.[2]

he indicates the importance of a semantic analysis of compounds,

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1. C. Rohrer, "Lees, R. B. The GEN, second printing, The Hague, Mouton & Co. 1963," Indogermanische Forschungen 71, 1966, p. 161.

2. H. Marchand, The Categories and Types ..., p. 11.

especially when contrasting compounds in two different languages. This means that compounding has to be explained on the semantic level, too, because languages as means of communication between members of a certain cultural group are highly influenced on a semantic level by their cultural background of this group. This is why certain combinations of sound-meaning units are unambiguously understood by native speakers of one language, whereas speakers of another language use different combinations to express the same meaning. We will explain the above on the basis of the following examples.

The English compound milksop, which has the structurally and semantically corresponding form molokosos in Russian, can be translated by the German compound Milchbubi. If, however, we would literally translate milksop and molokosos into Milchsauger, i.e. English and Russian N + N < V by German N + N < V, we would create a completely different meaning. If, in the opposite direction, we would translate Milchbubi literally into milkboy, i.e. German N + N by English N + N, again a difference in meaning would be the result, as milkboy would be understood in the same way and with the same semantic connotation as the existing English compound milkmaid.

At this point we may predict that the main differences in the compounding of two languages will lie within the semantic structure of the data, e.g., the Russian compound vodoprovodčik is not reflected by a structurally similar waterpiper in English, but by a simple N < V derivation plumber. In analyzing already existing material the problem of semantic ambiguity also plays an important part, especially in the distinction between compounds and other types of word formation. E.g. I saw a blackbird as opposed to I saw a black bird; the

compound blackbird has the same underlying deep structure as the formation black bird, i.e., the bird is black, but semantically they are different.[1] Apart from a phonetic examination of such formations, we are able to clearly distinguish between the compound blackbird and the formation black bird (simply a noun further specified by an adjective), only on the basis of this semantic difference.

Therefore, we may conclude that for the fulfillment of the above stated basic task of compound analysis, i.e., the formulation of a finite set of rules covering an infinite set of data, the consideration of semantic criteria is extremely important.

3.2 Various approaches to compound analaysis

In the introduction we have already stated the two main differences in compound analysis, i.e., compounds are either analyzed on the basis of an underlying structure, i.e., paraphrase or sentence, or they are merely described on the basis of their surface structure, resulting in the theory that new compounds are formed in analogy to already existing formations. Now we will attempt to show the different findings and results to which each approach leads in English and Russian compounding.

As Marchand and Lees both start from the same basic principle, an analysis and classification of English compounds on the basis of the

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1. This statement is based on Lees' remarks on this problem.

relationships among the elements in their corresponding deep structures,[1] i.e., word formations or sentences on the basis of which compounds are formed, their theories will be described first. After this we will describe the other approaches.

3.2.1 Lees and Marchand

Both Lees and Marchand investigate the syntactical relationship between the two parts of compounds, i.e., determinant and determinatum, in order to classify English compounds.

> ... we shall now take up those compound types to be studied in groups, according to the grammatical relation in the kernel sentences underlying them which the compound produces.[2]

Marchand further states that "all compounds are explainable on the basis of syntactic relations underlying them in sentences."[3] From this we can conclude that compounds are analyzed and classified according to the syntactic functions of their elements in the corresponding "kernel sentences." Marchand gives the following reason for this approach:

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1. T. M. Nikolaeva states in her review of Lees' Grammar of English Nominalizations:

> Liz daet klassifikaciju složnyx slov soglasno ix proisxoždeniju. Za isxodnye elementy pri etom prinimajutsja ne časti reči, a funkcional'nye časti predloženija.

in. "Robert B. Lees. The Grammar of English Nominalizations," Issledovanija po strukturnoj tipologii, ed. by T. N. Mološnaja. (Moskva: Ak. nauk, 1963). p. 247.

2. R. B. Lees, GEN, p. 125.

3. H. Marchand, The Categories and Types ..., p. 18.

> A sentence is based on the same structural principle of a determinatum/determinant relationship as is a compound, the difference being that the sentence is a complete utterance, while the compound is only part of an utterance.[1]

On the basis of the above described approach Lees divides nominal compounds into eight main groups:

I	Subject	- Predicate
II	Subject	- "Middle Object"
III	Subject	- Verb
IV	Subject	- Object
V	Verb	- Object
VI	Subject	- Prepositional Object
VII	Verb	- Prepositional Object
VIII	Object	- Prepositional Object

In the following we will explain how Lees establishes these groupings:

I Compounds of this type are derived from sentences with the structure "NP + Aux + b + predicate," e.g. The friend is a girl ⇒ girlfriend. The components Aux and Copula are deleted and the predicate is positioned in front of the NP.

II These are compounds derived from the kernel sentences "NP - middle verb - NP." According to Lees middle verbs are verbs which cannot be transformed into a passive structure, despite the fact that they have an object, e.g., to have, to cost, etc. Under this type he classifies formations, such as artist's model, doctor's office etc., i.e., formations with a possessive genitive.

III This type is one of the most productive patterns in compounding and can be divided into many subgroups. Compounds of this type are payload, earthquake, farm production etc. Their analysis is based on the following transformation pattern: the bird wades ⇒ wading bird.

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1. H. Marchand, The Categories and Types ..., p.31.

IV The kernel sentence of such compounds has the structure "Subject - Verb - Object." The verb, which is deleted during the transformation of these sentences into compounds, belongs to a group of verbs with the connotation make, yield, cause, produce, e.g., the thief steals a car ⇒ carthief, the well pumps oil ⇒ oilwell. Because of the deletion of the verb for this type the problem arises that we would have to formulate a transformation rule for each existing transitive verb.[1]

V The components of compounds of this type have a verb - object relationship, e.g., eating apple, pickpocket, sightseeing.

VI According to Lees prepositional objects are adverbial supplements, such as in the garden, at night etc., e.g., the party is in the garden ⇒ gardenparty, the owl flies at night ⇒ nightowl.

VII This type of compounding follows the transformational pattern the stone is for grinding ⇒ grindstone,

VIII This type is derived from the same type of deep structure as type VII with the following difference:
Die beiden Sätze, die den Komposita dieses Typs zugrunde liegen, entsprechen in ihrer Struktur genau denen des Typs: grindstone. Während jedoch bei grindstone das Verb mit der Umstandsbestimmung zu einem zusammengesetzten Wort verbunden wurde, wird hier direktes Objekt und Umstandsbestimmung zu einer neuen Einheit, z.B.
The ring is for N
John fights bulls in the ring ⇒ bullring
Beispiele dieses Typs sind: bubble gum, coffee break, childbed, fruit market, ... etc. [3]

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1. Rohrer mentions this problem in the above quoted review of the GEN:

"Damit kommen wir aber gleichzeitig zu dem von Lees sicher nicht gewünschten Resultat, dass wir für den Typ Subject - Object fast genausoviele Regeln formulieren müssen, als es transitive Verben gibt. Wir brauchen eine Regel für carthief, die das verb to steal elidiert, eine Regel für silk merchant, die das Verb to sell elidiert, etc."(p. 166).

This problem has to be seen in the context of standard transformational theory.

3. Ibid., p. 169.

In contrast to Lees, who analyzes and classifies compounds according to the relations between the determinant and the determinatum elements, Marchand analyzes compounds with regard to the function of the determinatum in the kernel sentences. He gives the following reason for this approach:

> In the nominalization one grammatical part of the sentence is taken to be known: the Subject, the Object, the Predicate, the Predicate Complement, or the Adverbial Complement, and it is this part of the sentence that becomes the determinatum of the composite, while its syntagmatic complement in the sentence, i.e., the part that supplies information with regard to the determinatum, invariably becomes the determinant. We will call these selectional patterns of information "types of references."[1]

His two main groupings of English compounds are the already mentioned verbal nexus compounds and regular nominal compounds. These two types of compounding he divides into the following categories:

verbal nexus compounds			
subject type	object type	predication type	adverbial complement type

nominal compounds			
subject type	predication type	object type — affected object / effected object	adverb. complement type

1. H. Marchand, The Categories and Types ..., p. 32.

On this classification of English compounding he bases the further analysis of compound formations.

"The basic types of nominal compounds"[1] (i.e., the second type) are so-called copula compounds and rectional compounds. Copula compounds are formations which can be analyzed by the formula AB = A as well as by the formula AB = B:

> They are all analyzable through copulative sentences containing the verb to be. An oak tree is both a tree and an oak, teaching profession is teaching as well as (a) profession, a girl friend is both a friend and a girl, a blackbird is a bird and (something) black.[2]

Rectional compounds, on the other hand, are only analyzable according to the formula AB = B:

> They comprise such compounds as steamboat, craftsman, writing-table, goldsmith, and many others. A steamboat is only a boat, but not a steam, a craftsman is only a man, not a craft(s), a writing-table is only a table, not a writing, and a goldsmith is only a smith, but not gold.[3]

Any further classification within the above described groups is based on semantic criteria, e.g., the group of verbal nexus compounds is specified in the following way:

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1. H. Marchand, The Categories and Types ..., p. 40.
2. Ibid., p. 40.
3. Ibid., p. 40.

> The S-type denotes persons (writer), animals (pointer), concrete things (blotter) and immaterial things seen as endowed with force (reminder).
> The O-type denotes persons (draftee), concrete things (drawbridge), and something abstract that expresses a result (yield).
> The Pr-type in principle yields abstract substantives denoting several shades of activity (dancing in general, dance a dance = one specific instance). But the instance of the activity may take concrete shape (as in waterfall).
> The Ad-type yields chiefly concrete substantives for 'place' (writing table) and 'instrument' (writing pen) while a smaller group are 'time' words (closing time). The bulk of this group belong to the morphologic types whetstone and writing table.[1]

Within the limited space of this presentation it would take up too much time to further examine the details of Lees and Marchand's analysis. In conclusion, however, we may state that, despite the fact that they base their classification on an analysis of the corresponding kernel sentences of compounds, both linguists obtain different results, as is obvious from the above description.

3.2.2 Hansen

In contrast to the above described approaches to the analysis of compounds, K. Hansen does not exclusively base his classification on an investigation of their corresponding deep structure. The surface structure plays a very important part, too. The three basic criteria of his analysis and classification are:

a) part of speech of the compound.

b) part of speech of the components.

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1. H. Marchand, The Categories and Types ..., p. 33.

c) the semantic/syntactic relations among the components and among the components and the formation as a whole.[1]

In order to exemplify the way Hansen employs the so-called syntactic equivalents, we present fig. 4.

fig. 4.

compound	syntactic equivalent	basic meaning (Grundbedeutung)
book seller	one who/something that + verb + substantive	someone/something, who/which does something (2. component) which has an object denoted by the I. comp.

Syntactic equivalent and basic meaning are used in order to attempt a semantic limitation of compounds within the various groups.

> Die Bedeutungsmöglichkeiten der einzelnen Typen lassen sich bereits durch die Angabe einer semantisch äquivalenten oder quasi-äquivalenten Wortgruppe (in den Tabellen kurz 'syntaktisches Äquivalent' genannt), d.h. durch eine Art Transformation, andeuten.[2]

Nevertheless, it remains questionable, whether this approach guarantees the formulation of a set of recursive rules which covers the syntactic as well as the semantic correctness of new compounds. Hansen himself expresses doubts:

> Als Unsicherheitsfaktor kann dabei bereits die Mehrdeutigkeit der Komponenten auftreten (vgl. z.B. head in head-dress, headlight/headline und head physician).[3]

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1. Compare K. Hansen, op. cit., p. 68.
2. Ibid., p. 68.
3. Ibid., p. 124.

In what follows we will describe the various steps of Hansen's classification of compounds:

A) The first check investigates whether the two components agree in their part of speech; if so, we may at once proceed to point (C).

B) Here the coordinate or subordinate relationship between the two components is analyzed. This is done by an inversion of the two components following the formula "both substantive/adjective and substantive/adjective," e.g., actor manager = manager actor. This inversion is only possible, if the components have a co-ordinate relationship (e.g., subordinate relationship bank manager ≠ manager bank).

> Fällt das Ergebnis der genannten Prüfung positiv aus, so kann die Analyse abgeschlossen werden: es liegt ein sogenanntes Kopulativkompositum mit der Grundbedeutung (zugleich) Subst./Adj. und Subst./Adj. vor. Geht nur eine Prüfung negativ aus, so muss die Analyse unter Zuhiffenahme weiterer Kriterien fortgesetzt werden.[1]

C) At this step compounds are divided into endocentric and exocentric formations. As we have already described Hansen's definition of this distinction in chapter two, no further explanation is necessary at this point.

In order to further exemplify Hansen's approach we quote the checking list he has developed for the analysis and classification of English compounds.[2] The tables (Tabellen) will be added in the

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1. K. Hansen, op. cit., p. 118.

2. Copied on p. 64.

Zahlenerläuterung:

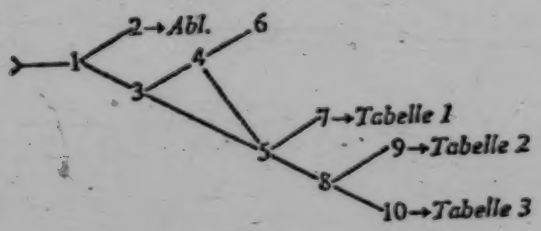
1 — Ist das „Kompositum" ein Verb oder ein Nomen (Subst., Adj.)? (Vgl. 2.2.1.)
  (a) Verb: → 2 (→ Ableitung)
  (b) Nomen: → 3

3 — Stimmen die beiden Komponenten hinsichtlich der Wortart überein oder nicht überein? (Vgl. 2.2.2.)
  (a) Übereinstimmung: → 4
  (b) Nichtübereinstimmung: → 5

4 — Ist die erste Komponente der zweiten gleichgeordnet oder untergeordnet? (Vgl. 2.2.3.)
  (a) Gleichordnung: → 6 (Kopulativkompositum)
  (b) Unterordnung: → 5

5 — Ist das Kompositum ein Adjektiv oder ein Substantiv? (Vgl. 2.2.4.)
  (a) Adjektiv: → 7 (→ Tabelle 1)
  (b) Substantiv: → 8

8 — Ist das Kompositum semantisch-syntaktisch durch die zweite Komponente ersetzbar oder nicht ersetzbar? (Vgl. 2.2.5.)
  (a) Ersetzbarkeit: → 9 (→ Tabelle 2)
  (b) Nichtersetzbarkeit: → 10 (→ Tabelle 3)



Beispiele: *to spotlight/stagemanage*: 1 – 2 → Ableitung
actor-manager/deaf-mute: 1 – 3 – 4 – 6
bank-manager: 1 – 3 – 4 – 5 – 8 – 9 → Tabelle 2
red-hot: 1 – 3 – 4 – 5 – 7 → Tabelle 1
blueberry: 1 – 3 – 5 – 8 – 9 → Tabelle 2
bluejacket/bluebell: 1 – 3 – 5 – 8 – 10 → Tabelle 3 (1)
watertight: 1 – 3 – 5 – 7 → Tabelle 1 (1.1)
playground: 1 – 3 – 5 – 8 – 9 → Tabelle 2 (2.1)
pickpocket: 1 – 3 – 5 – 8 – 10 → Tabelle 3 (2.1)

appendix to this thesis. From the preceding analysis it becomes obvious that in Hansen's approach, in contrast to that of Lees and Marchand, the surface structure of the English compound plays an extremely important part in its classification.

3.2.3 Russian grammars

As an example of the way Russian compounds have been treated till now in major grammars, the Grammatika sovremennogo russkogo literaturnogo jazyka has been chosen. We will briefly describe the main groups of Russian compounds and the criteria for a division of these into various subgroups as established by this grammar.

The two main groups of Russian compounds are "nominal compounds" (složnye suščestvitel'nye) on the one hand, and so-called "suffixal-nominal compounds" (suffiksal'no-složnye sušč.) on the other. The latter group consists of compounds with an affixed, in this case suffixed, basic component or head/nucleus (opornyj komponent), e.g., zemletroj-ka, avianos-ec, rukomoj-nik etc. Since we find such formations among the examples for the first group, i.e., regular "nominal compounds", as well, for instance gore-oxot-nik, samoprover-ka, gore-rukovodi-tel' etc., this distinction, apparently made in the grammar, appears to be questionable.

Nevertheless, we will describe the various steps of the subsequent analysis on the basis of this distinction. Regular "nominal compounds" are divided into the types mentioned and explained earlier: (a) compounds with a coordinate relationship between their components and (b) compounds with a subordinated relationship. Group (b) is then divided into subgroups according to the character of the first

component or modifier (pervaja osnova utočnitel'nogo xaraktera):

1. noun, e.g., zvukorežisser, xlebozavod etc.
2. adjective, e.g., novostrojka, suxofrukty etc.
3. numeral, e.g., odnotrubka, dvuokis' etc.

These subgroups are further analyzed and classified according to the first component and semantic criteria in the following way:

> Osobenno častotny složenija so sledujuščini pervymi komponentami: a) s osnovoj mestoimennogo prilagatel'nogo sam, oboznačajuščie dejstvie, napravlennoe na togo, kto ego proizvodit: samoproverka, samoobrazovanie ...; b) c komponentom vzaimousečennoj osnovoj prilagatel'nogo vzaimnyj, v sočetanii s nazvaniem dejstvij: vzaimovlijanie, vzaimopomošč', ...[1]

It is far from clear whether compounds with an (a) truncated or (b) bound first component are referred to as a new group or a subgroup, or whether these criteria are simply used to further specify the already mentioned groups. Examples for such compounds are: (a) truncated first component (stem) (usečennye osnovy) - avtotransport, i.e., avtomobil'nyj avto-, astrobotanika, i.e., astronomija astro-; (b) bound first component (svjazannye komponenty) - biozaščita, videozapis' etc. Most of the examples given by the grammar are of international character, e.g., avia-, bio-, aero-, etc.

Another subgroup of compounds with a subordinated relationship is established according to the second component. These are compounds with bound basic components (svjazannye opornye komponenty), which

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1. Grammatika sovremmennogo russkogo literaturnogo jazyka, p.162.

again are further divided according to the character of the first component and semantic criteria in the above described way. From the way of classifying the first main type of Russian compounds indicated here, we can already see the clumsiness and ineffectiveness of this approach. Moreover, no attempt is made to form a basis for the formulation of rules for compounding, the most important part of compound analysis.

The second main type of Russian compounds, i.e., suffixal-nominal compounds, is divided into two subgroups: (a) compounds with a verbal basic component (head) and (b) compounds with a nominal basic component. These subgroups are further specified according to the occurring suffixes and at one point semantically described in the following way:

> Suščestvitel'nye s suff. -ec oboznačajut predmet (...), proizvodjaščij dejstvie ... Slova etogo tipa - nazvanija lic, životnyx, orudij (mexanismov).[1]

All other occurring suffixes are described in the same way. The remarks about bound basic components again remain highly ambiguous. Compounds with a ∅ - suffix are referred to as a special group but are analyzed according to the already mentioned criteria.

3.2.4 Raecke

In contrast to the approach of the Grammatika sovremennogo russkogo literaturnogo jazyka, J. Raecke analyzes and classifies

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1. Grammatika sovremennogo russkogo ..., p. 166.

Russian compounds on the basis of corresponding sentences, which he calls "minimal sentences" (Minimalsätze). On this basis he establishes the following two main groups:

1. Verbal group (Verbalgruppe), e.g., kvasodel, paroxod, vodopad, etc.

> So sind die ... Beispiele jeweils durch Verbalfügungen, wie delat' kvas, chodit' parom, voda padaet zu erläutern und dementsprechend motiviert,...[1]

2. Nominal group (Nominal gruppe), e.g., širokopleč, krivinožka, etc.

> Ein syntaktische Analyse wurde jeweils etwa ergeben: širokoplec - u nego širokie pleči - pleči širokie; krivo-nožka - u neë krivye nogi - nogi krivye;... Derartige Komposita lassen sich also auf Nominalfügungen zurückführen.[2]

Raecke bases any further classifications on syntactic, morphological and semantic criteria. In the following we will describe the various stages of his analysis. First we will investigate the "verbal group".

The first step divides compounds of the "verbal group" into 1) Verb - Substantive group and 2) Verb - Adjective group, with regard to the part of speech of the first component, which is linked to the verbal (second) component. Examples for group one are ledokol, snegopad etc., and for group two examples, such as krasnogon, skorobežec etc., are given.

The next step investigates the syntactic relations between the verbal component and the substantive (1) and the verbal component and adjective (2).

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1. J. Raecke, op. cit., p. 39.

2. Ibid., p. 39.

> Die weitere Gliederung der Verbalkomposita erfolgt nach der verschiedenen syntaktischen Beziehung des Verbs zu den Substantiven (1) und den Adjektiven (2).[1]

On the basis of this criterion Raecke establishes the following types of substantive group:

1. Object type (Objekt Typ), e.g., voskobel < belit'vosk, i.e. V-tr - object;
2. Subject type (Subjekt Typ), e.g., volnoboj < yolny b'jut, i.e. Subj. - V;
3. Instrumental Type (Instrumental Typ), e.g., kon'kobežec < begat' na kon'kax, i.e. V - Subst. (instr.);
4. Local Type (Lokal Typ), e.g., moreplavanie < plavat' na more i.e. V - Subst. (loc);

The "verbal type" can only be divided into two types:

1. Object type:

> Dieser Typ besteht in der Umsetzung einer Verb-Adjektiv-Fügung, in der das Adjecktiv eine Objekt Beziehung zum Verb aufnimmt. Es handelt sich dabei im allgemeinen um eine Verkürzung einer Adjektiv-Substantiv-Gruppe unter Auslassung des zugehörigen Substantivs. Als Beispiele mögen krasnogon - Jagdhund für Pelztiere und syroed - der sich mit rohem Fleisch ernährt dienen, die sich zurückführen liessen auf die syntaktischen Fügungen: gnat' za krasnyj zver' - Rotwild jagen und est' syroe m'aso - rohes Fleisch essen.[2]

2. Adverbial type:

> Dieser Typ ist die Verbindung eines Verbs mit einem Adjektiv, das die Funktion eines Adverbs hat. borzo-chodec - Schnellläufer und skoro-govorka-das Schnellsprechen dürften als Beispiele genügen; die Verbalfügungen wären chodit' borzo - schnell gehen und govorit' skoro - schnell sprechen.[3]

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1. J. Raecke, op. cit., p. 41.
2. Ibid., pp. 44-45.
3. Ibid., p. 45.

The last step of Raecke's analysis is a distinction according to the morphological shape of the various suffixes taking part in the formation of a compound,[1] combined with a distinction between the various semantic connotations of these suffixes:

> Die letzte Kennziffer schliesslich fasst die Komposita der Verbalgruppe nach Bedeutungsgruppen zusammen. Das Nichtpalatale Nullsuffix z.B. erfüllt innerhalb der Komposita, die zur Verbalgruppe gehören (1), aus einer Verbalfügung mit Substantiv und Verb (1) mit Objektrelation (1) entstammen und als Substantive (1) mit Nullsuffix realisiert sind, drei Funktionen: (1) es dient zur Bildung von Nomina agentis, (2) es bezeichnet Naturerscheinungen und Gerätschaften, (3) es signalisiert Tier- und Pflanzenbezeichnungen.[2]

In this way according to Raecke each Russian suffix is complete and can be divided into various types of meaning.[3]

Compounds of the "nominal group," which are reflected on a syntactic level by formations of Adj. + Subst., Subst. + Subst., and Adj. + Adj., are analyzed and classified on the basis of the same principles as the ones described for the "verbal group,"[4] therefore we will only quote the five main types Raecke establishes for this group:

1. Zusammensetzungen von Qualitätsadjektiven mit Substantiven,
2. Beziehungsadjektiven mit Substantiven,
3. Substantiven mit Substantiven,
4. Adjektiven mit Adjektiven,
5. Adverbien mit Adjektiven.[5]

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1. J. Raecke, op. cit., pp. 46-47.
2. Ibid., p. 46.
3. Ibid., p. 47.
4. Ibid., p. 54.
5. Ibid., p. 52.

However, Raecke excludes the last two groups from any further investigation. The above quoted main types are then described, following the same steps of the investigation as the ones established for the "verbal group."

To sum up we may state that Raecke's system is reminiscent in its basic principles of Marchand's analysis of English compounding. However, we will only describe the difference between the two with regard to the investigation of suffixes in their analysis, as this problem also reflects a major difference in Russian and English compounding. This difference, where the suffixes in Russian compounds are thoroughly investigated by Raecke, but almost neglected by Marchand, for English compounding, is understandable in that Russian compounding involves a larger variety of suffixes with specific semantic connotations than English compounding. Therefore, suffixes in Russian form a solid basis for a distinction between various groups and for a further indication of their characteristics.

The above mentioned fact can be best illustrated in the following example. The English suffix -er, denoting animate or inanimate subject/doing something, is reflected by various suffixes in Russian with more specific and limited meanings, such as -ec in cvetovodec, -ka in pivovarka, -nik in zemledel'nik etc. Based on this major structural and semantic difference between Russian and English compounds, a further distinction within the main groups of Russian compounds, as proposed by Raecke, appears to be justified and useful.

3.2.5 P. W. Schönle

As Schönle does not establish any new criteria for his approach to

compound analysis in Russian, an extensive description and exemplification of the various steps of his classification is unnecessary. Therefore, we will only describe Schönle's basic principles as established in his monograph Zur Wortbildung im modernen Russisch. He startsthe analysis of Russian compounds by an investigation of their surface structure:

> In diesem Kapitel werden wir nun auf der Basis des w.o. skizzierten, oberflächenstrukturell orientierten klassifikatorischen Vorgehens (Bildung von Paraphrasen, Konstituentenanalyse) unser Material im Rahmen der drei Kompositionstypen (A + N, N + N, N + V) belegen und ... innerhalb der einzelnen Typen im Detail erörtern.[1]

As can be seen from this quotation, he establishes the following three main types of Russian compounds: 1) A + N, i.e., adjective-noun formations; 2) N + N, i.e., noun-noun formations; 3) N + V, i.e., noun-verb formations.

The most productive group within the A + N -type is formed by so-called "reduction compounds" (Reduktionskomposita), i.e., compounds, in whose formational process a morphological change of the adjectival component takes place, e.g., avtobusnyj vokzal>avtovokzal. Any further classification is based on an investigation of these reduced adjectival components; e.g., avto - compounds, agro - compounds etc., which are all classified as compounds with an international first component. Compounds with a first Russian component, e.g., boe-, gruzo- etc., are divided into categories with regard to the same principle.

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1. P. W. Schönle, op. cit., p. 28.

In the following, he analyzes A + N compounds with suffixes in the same way as the above mentioned grammar:

> Wir werden nun im weiteren so vorgehen, dass wir anhand der einzelnen Suffixe die Ableitungen aufführen, die durch das Syntagma: Adjektiv + Substantiv mo tiviert sind.[1]

For the N + N compounds, which according to Schönle form a rather small group compared to the other two types,[2] he only gives a short description of their main characteristics:

> Die Komposita dieses Typs weisen als Paraphrasen Syntagmen auf, die aus zwei Substantiven bestehen. Dabei kann die Esstkomponente des Kompositums entweder als casus obliquus oder als Präpositionalausdruck wiedergegeben werden (kroveparazity - parazity krovi, radiorasskaz - rasskaz (peredavaemyj) po radio, molokodegazator - degazator dlja moloka).[3]

To this group belong also compounds which are repeatedly motivated, i.e., they can be paraphrased by adjectival as well as nominal syntagms.[4] According to Schönle these are so-called synonymous expressions, such as gazoballon - gazovoj ballon vs. ballon dlja gaza and nefterezervuar - neftjanyj rezervuar vs. rezervuar dlja nefti.

N + V compounds are treated in the already mentioned way of a subclassification with regard to the suffixes, which occur in the formation of such compounds. However, Schönle further analyses these

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1. P. W. Schönle, op. cit., p. 70.
2. Ibid., p. 84.
3. Ibid., p. 83.
4. Ibid., p. 83-84.

formations according to the verbal (second) component:

> Die Komposita dieses Typs, die mit dem Syntagma N + V paraphrasierbar sind (molokovoz - vozit' moloko), werden wir so subklassifizieren, dass wir zunächst die Komposita, die dasselbe Suffix aufweisen, jeweils in einer Gruppe zusammenfassen und innerhalb dieser Gruppen an Hand der den Zweitkomponenten zugrundeliegenden Verben Untergruppen bilden.[1]

It is unnecessary to point out the lacks and disadvantages to which such an approach can lead.

3.3 Conclusion.

We have already said that the basic task of compound analysis is not only a description of the subject but also the finding of a limited set of recursive rules for the unlimited set of data. Although on the basis of all described approaches we can establish rules of one sort or another, most of these possible rules would only cover a limited part of the phenomena, depending on the starting point of the particular approach.

Basically, compounding is a morphological phenomenon founded on the general rule: C(ompound) = stem (morpheme) + stem (morpheme).

However, in order to guarantee the well-formedness of possible new formations on all levels, we have to apply semantic and syntactic restrictions for the set of rules to be established.

The Grammatika sovremennogo russkogo literaturnogo jazyka mainly restricts itself to the morphological level of investigation, though

1. P. W. Schönle, op. cit., p. 89.

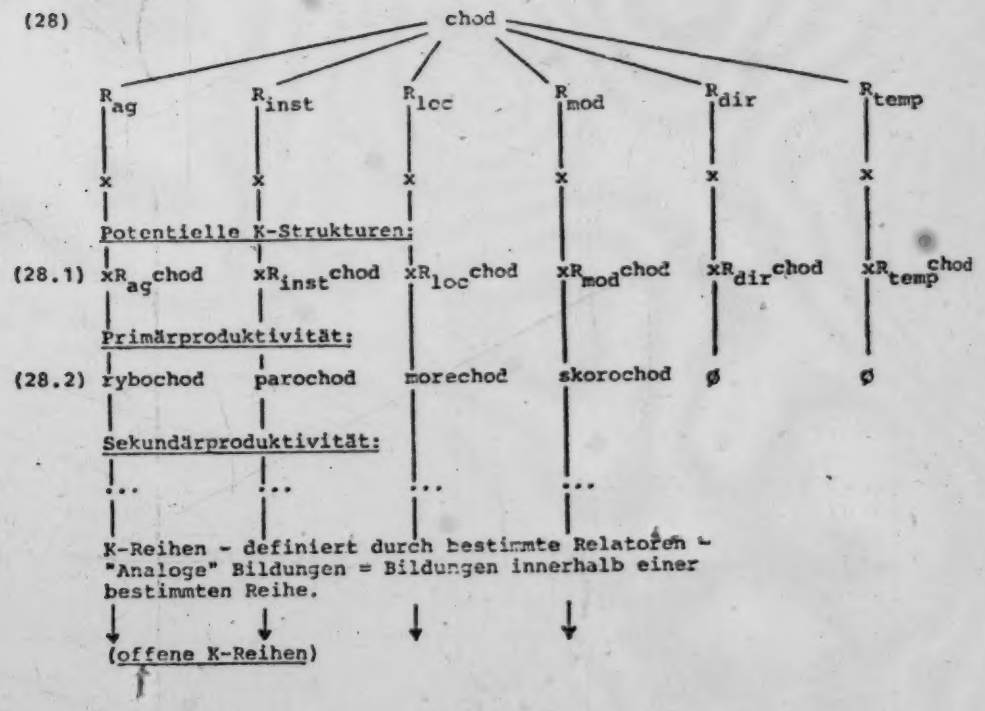
classification according to suffixes includes semantic criteria. However, these criteria are not suitable for an adequate semantic restriction of such rules; moreover, syntactic criteria are almost completely neglected.

Raecke, who starts from the morphological level, systematically includes syntactic and semantic criteria in the course of his analysis. On this basis a more adequate solution for the basic task of compound analysis could be provided. With regard to Schönle we can in principle make the same statement as that made with regard to Raecke, though the latter obtains a different system of classification. Nevertheless, the basic criteria are similar to the ones applied by Raecke.

On the basis of generative-transformational criteria however, as well as the smysl-tekst model by Mel'čuk and mainly on the basis of case-grammar criteria, as established by Fillmore, Schönle attempts to establish an adequate deep structure for Russian compounding. This deep structure at least integrates all three levels of compounding, i.e., morphology, semantics and syntax; such a model therefore, could be suitable for an adequate analysis and classification of the phenomenon compound and, furthermore, promises to provide enough material for the establishing of an adequate set of rules.

As an extensive description of the proposed model would overstep the limited boundaries of this presentation, we shall be content with the reproduction of one of the diagrams Schönle establishes, which, for our purposes here, adequately exemplifies the character of such a deep structure:

(28)



This attempt at least seems to provide valid starting points for a further investigation of the topic.

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1. P. W. Schönle, op. cit., p. 164.

4. BRIEF OUTLINE OF A NEW APPROACH TO COMPOUND ANALYSIS

In looking at the approaches to compound analysis described in the preceeding chapter, it appears that one would be justified in saying that one aspect of compounding has been thus far neglected in our investigation. We have in mind the extensive investigation of possible regularities in the order of the various elements of a compound within the formation. As compounding uses almost any type of existing sound-meaning units, such as noun, adjective, verb etc., it appears to be questionable that their order, i.e., the fact that a certain component is in first or second position, has no significance with regard to syntactic and semantic criteria. So far, compounds have been analyzed on the basis of the grammatical character and the syntactic function of their components, however, possible regularities within the order of these components have not been looked at.

The fact that order has some significance can be seen from the following test; if we simply switch the two components of an existing compound, in most cases the formation looses its syntactic structure as well as its specific meaning, or it becomes completely meaningless, e.g., highrise ≠ rise-high, shoemaker ≠ maker-shoe, vodovoz ≠ vozovod , luno-xod ≠ xodoluna. Additionally, in some cases a complete change of meaning can be observed, e.g., tap-water ⇔ water-tap.

Due to the restricted scope of this thesis we cannot investigate all types of compounds with regard to this new criterion, only a brief outline of the problem can be given. Therefore, we will limit ourselves to an investigation of a selected set of data; we will look at various types of Russian "verbal compounds," i.e., nominal compounds

with a verbal component, as this type appears to be the best example for the existence of the above mentioned regularities.

Due to the limits and purpose of our presentation we will not be able to provide a complete solution and shall be forced to restrict ourselves merely to a proposal suggesting a possible new approach, which might result in new ideas for finding and establishing recursive rules for the formation of compounds. We will confine ourselves to a justification of this proposal on the basis of selected examples. An extensive investigation of this problem with all its various aspects has to be left to another, more specialized presentation.

All our statements will refer to the following examples which give a representative cross-section of the various types of Russian "verbal compounds" as established by Raecke:[1]

A.	zlo-dej	< čelovek delaet zlo	- (villain)
	luno-xod	< mašina xodit po lune	- (moon-rover)
	vodo-voz	< čelovek vozit vodu	- (water-carrier)
	zakono-ved	< čelovek vedaet zakon	- (jurist, tutor in law)
	vodo-provod	< instrument provodit vodu	- (water-pipe)
	zemle-del'ka	< ženščina delaet zemlju	- (farmer (fem.))
	domo-vodka	< ženščina vodit dom	- (housekeeper (fem.))
	vero-lomka	< ženščina lomit veru	- (traitor (fem.))
	bogo-borec	< čelovek boretsja s bogom	- (theomachist)
	zemle-delec	< čelovek delaet zemlju	- (farmer)

1. J. Raecke, op. cit., pp. 121 ff.

pis'mo-nosec	< človek nosit pis'mo	- (postman)
vino-pivica	< ženščina p'et vino	- (wine-drinker)
cveto-vodica	< ženščina vodit cvety	- (flower-grower)
ikono-pisica	< ženščina pišet ikony	- (icon-painter)
vero-otstupnik	< človek otstupaet ot very	- (apostate)
ruko-mojnik	< mebel' gde mojutsja ruki	- (wash-stand)
zoloto-iskatel'	< človek iščet zoloto	- (gold digger)
bogo-služenie	< ljudi služat bogu	- (worship, divine service)
korable-krušenie	< korabl' krušitsja	- (ship-wreck)
krovotečenie	< krov' tečet	- (bleeding)

These examples, even though they do not cover all types of Russian nominal compounds with a verbal component, will suffice for our purposes here. However, a closer look at all other formations given by Raecke shows that all these types of compounds have the verbal component in second position.

In contrast to the data given above, let us now look at formations with the verbal component first:[1]

B.	perekati-pole	- (baby's breath (bot.), rolling stone (pers.)) (or:tumble-weed)
	sorvi-golov a	- (daredevil)
	gori-cvet	- (ragged robin, lynchis (bot.))
	skopi-dom	- (hoarder, miser)
	boli-golov	- (hemlock (bot.))

Taking a look at the surface structure of these compounds, we observe that all examples of group (A) have the regular constituent

1. Examples taken from GVozdev, op. cit., pp. 121-122.

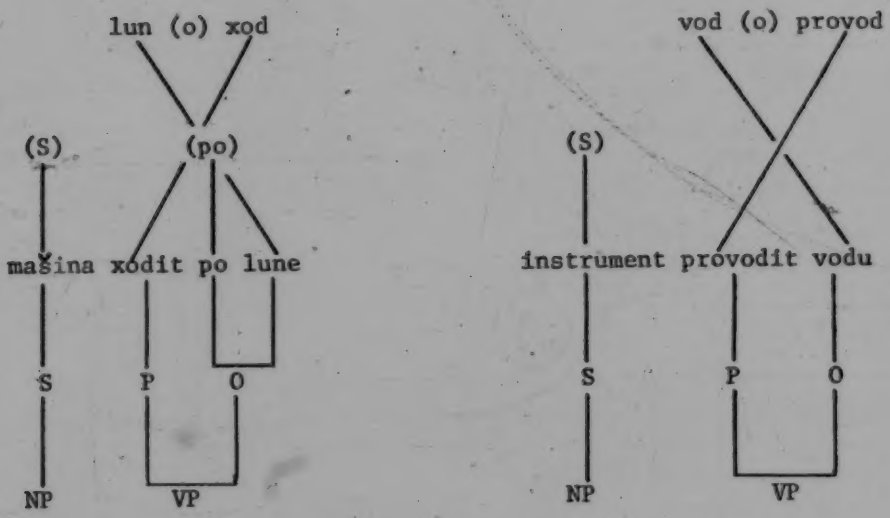
order N + V.

This is rather surprising, as generally in Russian the word order is variable, e.g., next to an S + V + O order also an O + V + S and other word orders are possible. These possibilities result from various syntactic and semantic criteria, e.g., contrastive stressing, theme - rheme (aktual'noe členenie), i.e., the concentration of the basic subject, etc. The question which arises is, why the Russian compound system exclusively restricts itself to only one of the possible word-order varieties, i.e., the N + V pattern with regard to "verbal compounds."

In general, we may state that the most adequate approach to this problem would be based on a theoretical pattern, which provides the possibility of describing the various steps of the process of compound formation. Therefore, we propose the development of a deep structure for Russian compounding on the basis of transformational criteria. The question remains, which one of the many existing generative - transformational theories would provide the best chances for a solution to the problem at hand. This question would have to be answered within a larger theoretical study of the problem of word order in Russian compounding.

One possibility would be to establish a deep structure which, a la Chomsky, assumes a word order S + P + O. Starting from such a point we could develop a rule which postulates a re-ordering of the constituents in the process of compound formation. This we will try to exemplify by means of fig. 5. Again, due to the confinements of this presentation we cannot include all the various steps which occur in the formation of a compound.

fig. 5.



On the basis of the latest assumptions of various generative-transformational theories, it has, however, been stated that within the deep structure no linear word order exists.[1] Considering such theories, the question to be looked into would be, why in the first place a regular N + V order is possible in Russian "verbal compounds."

All examples of group B can be explained on the basis of a syntactic analysis of their surface structure. Here we find examples for "verbal compounds" with a first verbal component, i.e., a V + N order. This may be due to the fact that the verbal component is a morphological imperative, which in Russian always precedes the

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1. Compare G. Schaarschmidt, "On the Typological Variability of Argument Re-grouping in the Slavic Languages", Canadian Contributions to the VIII International Congress of Slavists, ed. by Z. Folejewski et. al. (Ottawa: Canadian Association of Slavists, 1978),pp. 117-142.

Schönle proposes a deep structure of this kind for his model of Russian compounds as can be seen on p. 76 of the present thesis.

object. With regard to this problem semantic criteria do not have any significance, because the fact that the examples, given in group (B) and semantically classified as so-called "idiomatic compounds"[1] on the basis of the earlier delineated definition of compounds, does not have any impact on the constituent order within such formations for the syntactic reasons explained above.[2]

Concluding, we may say that an extensive investigation of the proposed problem promises to have serious impact on the solution of the fundamental task of compound analysis. On the basis of an examination of the order of compound components, it could be possible to cover many important aspects in establishing a limited set of rules for the formation of an unlimited set of data, i.e., compounds. Since we have understood that this problem contains morphological, semantic and syntactic aspects, it might be possible to establish rules which cover the semantic, as well as the syntactic well-formedness of newly formed compounds. Therefore, we shall conclude our findings with a reference to this interesting prospect of future investigation into compounding.

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1. Compare p. 46 of this thesis.

2. No such easy solution seems to be available in the case of verb-initial compounds, such as trjasoguzka, (wagtail), since the first part is not an imperative. Such cases must remain unexplained for the time being.

5. CONCLUSION.

Basing ourselves on the statements in this thesis we may say that compounding, as one of the most diversified features of word formation, has to be analyzed using criteria which include all of the following parts of grammar: morphology, syntax and semantics. This results from the fact that in the development of a recursive set of rules, i.e., the major task of compound analysis, we have to include adequate semantic and syntactic restrictions in order to further specify the basic morphological structure of compounds. Only then can the well-formedness of new formations on all three levels be guaranteed.

Furthermore, only on such a foundation can we investigate the productivity of existing compound types and hypothetically predict new formations. As has been shown in the course of this presentation, none of the described approaches provides a complete solution for this underlying problem of compound analysis.

To finish, however, we may comment that the evaluation of all problems connected with the phenomenon compound clearly indicates the effectiveness of an approach which investigates the process of compound formation. An approach which accepts the theory that compounds are formed on the basis of corresponding paraphrases or a deep structure of one kind or another, is more likely to lead to adequate results, than an approach which simply bases the analysis on the assumption that compounds are formed analogically, following the pattern of already existing units.

This assumption may lead to the formation of many ill-formed

compounds, simply because it cannot take into account the three discussed levels of analysis. Rather it is based on a principle of imitation of the surface structure of existing material. Such a principle is adhered to primarily by Soviet grammarians.

With regard to the contrasts and similarities between Russian and English compounding, the assumption appears to be justified that the only differences of any relevance are established on a semantic level. The described approaches to the definition and analysis of compounds in either language indicate that the syntactic and morphological structure of compounding follows similar patterns in Russian and English.

Such a contrastive description on the basis of semantic criteria also provides more practical results and points of applicability in the usage of the findings of compound analysis with regard to teaching either English or Russian as a foreign language.

In the course of this presentation we have attempted to point out some of the important and sometimes controversial problems connected with the subject. Though in most cases a final solution could not be provided, we feel that the analysis of compounding in either language remains one of the most interesting, as well as one of the most important tasks of linguistics.

6. BIBLIOGRAPHY.

Academy Grammar (1960). Grammatika russkogo jazyka, Vol. 1. Ed. by V. V. Vinogradov et al. Moskva: Akademija Nauk.

Ball, A. M. (1951). The Compounding and Hyphenation of English Words. New York.

Bloomfield, L. (1933). Language. New York: Henry Hold & Company.

Boguslawski, A. (1976). "On the Status of Word Formation." International Review of Slavic Linguistics, Vol. 1, No. 2-3, pp. 273-293.

Bukčina, B. Z. (1974). Složnye slova. Moskva: Nauka.

Close, R. A. (1975). A Reference Grammar for Students of English. London: Longman Group Ltd.

Dickenmann, E. (1934[1]). Untersuchungen über die Nominalkomposition im Russischen. Teil 1. Leipzig, reprinted Liechtenstein 1968.

Downing, P. (1977). "On the Creation and Use of English Compound Nouns." Language, Journal of the Linguistic Society of America, Vol. 53, No. 4. Baltimore: Waverly Press.

Galinsky, H. (1962). "Gedanken zu einer neuen Darstellung der englischen Wortbildung." Die Neueren Sprachen 7, pp. 97-121.

Grammatika sovremennogo russkogo literaturnogo jazyka (1970). Ed. by N. Ju. Svedova et al. Moskva: Nauka.

Greenberg, J. H. (1966). Universals of Language. Cambridge, Mass.: The M.I.T. Press.

Grigor'ev, V. P. (1956). "O granicax meždu slovosloženiem i affiksaciej." Voprosy jazykoznanija 4, pp. 38-52.

Grinkova, N. P. (1958). "O nazvanijax jagod v vostočnoslavjanskix jazykax." Slavjanskaja filologija III, pp. 116-

Gvozdev, A. N. (1958). Sovremennyj russkij literaturnyj jazyk, čast' 1, fonetika i morfologija. Moskva: Prosveščenie.

Hansen, K. (1968). "Zur Analyse englischer Komposita." Wortbildung, Syntax und Morphologie. Ed. by H. E. Brekle & L. Lipka. Paris, The Hague: Mouton, pp. 115-126.

Iljušina, L. A. (1966). "Složnye suščestvitel'nye - nazvanija životnyx - v russkom jazyke." Vestnik M.G.U. Serija 10: Filologija, 3, pp. 66-69.

Lees, R. B. (1963[2]). Grammar of English Nominalizations. Indiana University Research Center in Anthropology, Folklore and Linguistics, Publication 12.

_____ (1966). "On a Transformational Analysis of Compounds: A Reply to Hans Marchand." Indogermanische Forschungen, No. 71.

_____ (1970). "Problems in the Grammatical Analysis of English Nominal Compounds." Progress in Linguistics. Ed. by M. Bierwisch & K. Heidolph. Paris, The Hague: Mouton.

Lomonosov, M. (1952). Polnoe sobranie sočinenij. Tom 7. Moskva-Leningrad: Nauka.

Marchand, H. (1957). "Compound and Pseudo-Compound Verb in Present-Day English." Anglistische Studien XXXII.

_____ (1960). "Die Länge englischer Komposita." Anglia, No. 78.

_____ (1969). The Categories and Types of Present-Day English Word-Formation: A Synchronic-Diachronic Approach. München: C. H. Beck'sche Verlagsbuchhandlung.

Menge-Verbeck, R. (1973). Nullsuffix und Nullsuffigierung im Russischen. Munchen: Verlag Otto Sagner.

Molinsky, S. J. (1973). Patterns of Ellipsis in Russian Compound Noun Formations. Paris, The Hague: Mouton.

Nickel, G. (ed.) (1972). Reader zur kontrastiven Linguistik. Frankfurt/M.: Athenäum.

Nida, E. A. (1949[2]). Morphology: The Descriptive Analysis of Words. Ann Arbor: The University of Michigan Press.

Nikolaeva, T. M. (1963). "Robert B. Lees. The Grammar of English Nominalizations." Issledovanija po strukturnoj tipologii. Ed. by T. N. Mološnaja. Moskva: Akademija nauk.

Obermann, M. (1969). Beiträge zur Entwicklung der russischen Sprache seit 1917. Meisenheim am Glan.

Ponomarev. V. I. (1953). "K istorii složnyx slov v russkom jazyke." Doklady i soobščenija instituta jazykoznanija Akademii nauk SSSR 4, pp. 44-58.

Pilch, H. (1961). "H. Marchand, 'The Categories and Types of Present-Day English Word-Formation, A Synchronic-Diachronic Approach'." Jahrbuch für Amerika-Studien 6., pp. 343-345.

_____ (1968). "Modelle der englischen Wortbildung." Wortbildung, Syntax und Morphologie. Ed. by H. E. Brekle & L. Lipka. Paris, The Hague: Mouton, pp. 160-178.

Raecke, J. (1972). Untersuchungen zur Entwicklung der Nominalkomposition im Russischen seit 1917. München: Slavistische Beiträge Bd. 56.

R'ašencev, K. L. (1968). "O sootnošenii složnyx slov so slovosočetaniem." Voprosy leksiki i frazeologii sovremennogo russkogo jazyka. Rostov: Izdatel'stvo Rostovskogo Universiteta. pp. 179 -

Rohrer, C. (1966). "Lees, R. B. The Grammar of English Nominalization, second printing, The Hague, Mouton & Co. 1963." Indogermanische Forschungen 71.,pp. 161 - 170.

Schaarschmidt, G. (1966). A Manual in Contrastive Linguistics: Part I. Edmonton: U of A, Department of Slavic Languages.

_____ (1978). "On the Typological Variability of Argument Re-grouping in the Slavic Languages." Canadian Contributions to the VIII. International Congress of Slavists. Ed. by Z. Folejewski et al. Ottawa: Canadian Association of Slavists. pp. 117-142.

Shanskij, N. M. (1968). Russian Word Formation. Oxford: Pergamon Press.

_____ (1970). "Affiksoidy v slovoobrazovatel'noj sisteme sovremennogo russkogo literaturnogo jazyka." Issledovanija po sovremennomu russkomu jazyku. Ed. by T. P. Lomtev & A. A. Kamynina. Moskva: Izdatel'stvo M.G.U.

Schönle, P. W. (1975). Zur Wortbildung im Modernen Russisch. München: Slavistische Beiträge Bd. 90.

Vasilevskaja, E. A. (1962). Slovosloženie v russkom jazyke. Moskva: Učpedgiz.

Ward, D. (1965). The Russian Language Today. London: Hutchinson University Library.

_____ (1973). "Appositional Compounds in Russian." Slavonic and East European Review L I, No. 122.,pp. 1-10.

Worth, D. S. (1977). A Bibliography of Russian Word-Formation. Columbus, Ohio: Slavica Publishers.

Dictionaries:

The Oxford English Dictionary on Historical Principles. Oxford: At the Clarendon Press.

The Oxford Russian-English Dictionary. Ed. by B. O. Unbegaun et al. Oxford: At the Clarendon Press, 1972.

Ožegov, S. I. (1968[7]). Slovar' russkogo jazyka. Moskva: Izdatel'stvo "Sovetskaja Enciklopedija."

Daum/Schenk (1974). Wörterbuch Russisch-Deutsch. Leipzig: VEB Verlag Enzyklopädie.

Bol'šoj anglo-russkij slovar'. Ed. by I. R. Galperin. Moskva: Izdatel'stvo "Sovetskaja Enciklopedija." 1972.

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